

---

**QUARTERLY MONITORING REPORT  
ACTIVE TREATMENT SYSTEMS  
FOURTH QUARTER 2004**

**AMERICAN CHEMICAL SERVICE NPL SITE  
GRIFFITH, INDIANA**

**MWH File No. 2090601**

**Prepared For:**

**American Chemical Service NPL Site RD/RA Executive Committee  
Griffith, Indiana**

---

**Prepared By:**

**MWH Americas, Inc.  
175 West Jackson Boulevard, Suite 1900  
Chicago, Illinois 60604**

**April 2005**

EPA Region 5 Records Ctr.



258671

**QUARTERLY MONITORING REPORT FOR  
ACTIVE TREATMENT SYSTEMS  
FOURTH QUARTER 2004**

**AMERICAN CHEMICAL SERVICE NPL SITE  
GRIFFITH, INDIANA**

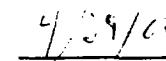
**Prepared For:**

**American Chemical Service NPL Site RD/RA Executive Committee  
Griffith, Indiana**

Prepared by:

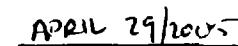


Jonathan Pohl, P.E.  
Project Engineer

  
4/29/05

Date

Approved by:

  
Peter Vagt, Ph.D., CPG  
Project Manager  
APRIL 29/2005

Date

## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
ACRONYMS AND ABBREVIATIONS .....	iv
1.0 INTRODUCTION .....	1
2.0 GWTP COMPLIANCE MONITORING .....	3
2.1 Introduction.....	3
2.2 Effluent Sampling and Analyses.....	3
2.3 Effluent Analytical Results.....	4
3.0 ISVE SYSTEM MONITORING .....	5
3.1 Thermal Oxidizer Off-Gas Sampling.....	5
3.2 Sampling Results .....	5
3.3 ISVE System Monitoring.....	6
4.0 GWTP TREATMENT SYSTEM PROCESS MODIFICATIONS .....	7
5.0 ISVE PROCESS MODIFICATIONS .....	8
6.0 PGCS AND BWES GAUGING ACTIVITIES .....	9
7.0 SYSTEM OPERATION .....	11
8.0 REFERENCES .....	12

## TABLES

- Table 2.1 Groundwater Treatment System Effluent Discharge Limits  
Table 2.2 Summary of Effluent Analytical Results – Fourth Quarter 2004; Groundwater Treatment System  
Table 3.1 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-14 (VOCs) – October 2004  
Table 3.2 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-14 (VOCs) – November 2004  
Table 3.3 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-14 (VOCs) – December 2004  
Table 3.4 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) – October 2004  
Table 3.5 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) – November 2004  
Table 3.6 Off-Site ISVE System and Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) – December 2004  
Table 3.7 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-14 (VOCs) – October 2004  
Table 3.8 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-14 (VOCs) – November 2004  
Table 3.9 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-14 (VOCs) – December 2004  
Table 3.10 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) – October 2004  
Table 3.11 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) – November 2004  
Table 3.12 SBPA ISVE System and Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) – December 2004  
Table 3.13 Off-Site In-Situ Vapor Extraction (ISVE) System Well Monitoring Data – Fourth Quarter 2004  
Table 3.14 Off-Site In-Situ Vapor Extraction (ISVE) System Header Monitoring Data – Fourth Quarter 2004  
Table 3.15 SBPA In-Situ Vapor Extraction (ISVE) System Well Monitoring Data – Fourth Quarter 2004  
Table 3.16 SBPA In-Situ Vapor Extraction (ISVE) System Header Monitoring Data – Fourth Quarter 2004  
Table 6.1 Water Table Elevations Across the Barrier Wall and Near the PGCS – Fourth Quarter 2004  
Table 6.2 Water Levels Inside Barrier Wall – Fourth Quarter 2004

## **FIGURES**

- Figure 6.1 Water Table Elevations Near the PGCS – December 2004  
Figure 6.2 Water Table Elevations Across the Barrier Wall – December 2004  
Figure 6.3 Water Level Trends Inside Barrier Wall (Still Bottoms Pond Area)  
Figure 6.4 Water Level Trends Inside Barrier Wall (Off-Site Area)

## **APPENDICES**

- Appendix A Effluent Analytical Data
  - October 19, 2004 Compliance Sample – Laboratory Results
  - November 30, 2004 Compliance Sample – Laboratory Results
  - December 15, 2004 Compliance Sample – Laboratory Results
- Appendix B Thermal Oxidizer Off-Gas Analytical Data
  - October 14, 2004 Off-Gas Sample Laboratory Results
  - November 11, 2004 Off-Gas Sample Laboratory Results
  - December 17, 2004 Off-Gas Sample Laboratory Results

## ACRONYMS AND ABBREVIATIONS

AS	Air Sparge
AMSL	Above Mean Sea Level
BOD	Biological Oxygen Demand
BW	Barrier Wall
BWES	Barrier Wall Extraction System
cfm	cubic feet per minute
DL	Detection Limit
DPE	Dual Phase Extraction
EF1	effluent sample
GAC	Granular Activated Carbon
Global	Global Engineering
GWTP	Groundwater Treatment Plant
"Hg	Inches of mercury
"H <sub>2</sub> O	Inches of water
IDEM	Indiana Department of Environmental Management
IN1	influent sample
IN2	duplicate influent sample
K-P	Kapica Pazmey
lb/hr	Pounds per hour
LDC	Laboratory Data Consultants
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NC	Not Calculated
ND	Not Detected
NE	No Effluent Limit Established
NS	Not Sampled
OFCA	Off-Site Containment Area
PCBs	Polychlorinated Biphenyls
ppm	Parts per million
PGCS	Perimeter Groundwater Containment System
PSVP	Performance Standard Verification Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SBPA	Still Bottoms Pond Area
S.U.	Standard Units
SVOC	Semi-Volatile Organic Compounds
T-102	Aeration Equalization Tank
TOC	Top of Casing
TOIC	Top of Inner Casing
TOSG	Top of Staff Gauge
TSS	Total Suspended Solids
µg	Micrograms
µg/L	Micrograms per liter
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

## 1.0 INTRODUCTION

MWH, on behalf of the ACS RD/RA Executive Committee, started up the on-site groundwater treatment system at the American Chemical Service NPL Site (ACS Site) in Griffith, Indiana on March 13, 1997. The groundwater treatment plant (GWTP) system was designed to treat groundwater from the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall Extraction System (BWES). The original treatment consisted of a phase-separator for oil and free product removal, equalization tanks, a UV oxidation unit for destruction of organic constituents, and an air stripper to remove methylene chloride and other organics. The treatment also included a chemical precipitation and clarification unit to remove metals, a sand filter to remove suspended solids, and activated carbon vessels for final polishing of the treated groundwater before it was released to the west of the site.

In 2001, an activated sludge treatment unit was added to the process to reduce the volatile and semivolatile organic compounds (VOCs and SVOCs) in the collected groundwater. The activated sludge treatment process also reduces the amount of activated carbon required to treat the water. An aerated equalization tank was also added to the GWTP in 2001 to remove VOCs from the collected groundwater, oxidize metals to increase metals removal efficiency in the chemical precipitation unit, and equalize groundwater flow through the GWTP. The activated sludge system and aeration tank have been fully integrated into the process along with the other upgrade components. Startup and optimization of the catalytic oxidizer/scrubber air treatment unit was also conducted during 2001.

The treated effluent from the treatment system is discharged to the nearby wetlands, west of the treatment system, in accordance with Agency approvals.

In the fall of 2001, MWH began construction of an In-Situ Vapor Extraction (ISVE) system for the Off-Site Containment Area (OFCA) and the Kapica-Pazmey (K-P) Area, both within the area known as the Off-Site Area. The Off-Site Area ISVE system consists of 42 ISVE wells, three air sparge wells, a blower system, a thermal oxidizer/scrubber unit, and the associated mechanical and electrical components. The construction of the system was completed in March 2002 and the system was started on May 1, 2002 after the startup of the thermal oxidizer and scrubber system was completed. Protocols and goals for the phased startup of the Off-Site System as defined in the Final Remedy (Montgomery Watson, 1999) were followed. In 2004, an additional blower system was added to the Off-Site Area ISVE system.

In the beginning of 2003, MWH began construction of an ISVE system for the Still Bottoms Pond Area (SBPA). The SBPA ISVE system consists of twenty-five ISVE wells, twenty-one dual phase extraction (DPE) wells, six air sparge wells, ISVE and air sparge blower systems, and the associated mechanical and electrical components. The construction of the system was completed and the system was started in July of 2003. A new thermal oxidizer/scrubber unit was installed in the GWTP in the spring of 2003. The new unit was installed to treat vapors from both ISVE systems.

This Active Treatment Systems report summarizes effluent analytical data, catalytic oxidizer/scrubber (annually) and thermal oxidizer off-gas analytical data, ISVE process monitoring data, and water level gauging data collected from October 2004 through December 2004. The report also details modifications and upgrades that were made to the active treatment systems during the reporting period.

## 2.0 GWTP COMPLIANCE MONITORING

### 2.1 INTRODUCTION

Effluent samples are collected on a regular schedule from the treatment system to demonstrate compliance with the discharge limits (Table 2.1) established by Indiana Department of Environmental Management (IDEM) and United States Environmental Protection Agency (U.S. EPA). The approved Performance Standard Verification Plan (PSVP) (Montgomery Watson, July 1997) requires quarterly effluent sampling for biological oxygen demand (BOD), total suspended solids (TSS), SVOCs, metals, and polychlorinated biphenyls (PCBs) in the system, and monthly effluent sampling for pH and VOCs, as tabulated below. In accordance with the PSVP, a full analysis effluent compliance sample was collected during October and analyzed for all of the analytes listed above. During November and December, the monthly effluent compliance sample was analyzed for VOCs and pH only.

Sampling and analyses were performed in accordance with the approved Quality Assurance Project Plan (QAPP) (Montgomery Watson Harza, November 2001). Quality control measures were also instituted in accordance with the PSVP. The following table and paragraphs present details on sampling and analyses and also summarize the analytical data for the treatment system effluent.

**Sampling Frequency Schedule – Groundwater Treatment System**

Analytes	Cumulative Time From Startup*	Frequency
Flowrate	–	Continuous
BOD, TSS, SVOCs and Metals	181 days onward	Once per quarter
VOCs and pH	31 days onward	Once per month
PCBs	181 days onward	Once per quarter
PCBs in Sediment (one location)	–	Once per year

\*Note: System was started up on March 13, 1997

### 2.2 EFFLUENT SAMPLING AND ANALYSES

Effluent samples were collected each month during the fourth quarter of 2004. Samples were collected on the following dates and analyzed for the listed analytes for this reporting period:

- |                   |  |
|-------------------|--|
| October 19, 2004  | full analysis (pH, TSS, BOD, Metals, VOCs, SVOCs, pentachlorophenol, and PCBs) |
| November 30, 2004 | pH and VOCs  |
| December 15, 2004 | pH and VOCs  |

The above samples were collected directly from a sampling tap on the effluent line of the treatment system. The samples were placed in contaminant-free containers, in accordance with the U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers (U.S. EPA, 1992). Appropriate sample containers and preservatives, as specified in the QAPP, were used to collect and preserve the samples. Following sample collection, the temperature of the sample containers was maintained at or below 4° C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories. In accordance with the approved QAPP, the effluent water samples were analyzed for the following parameters by the following analytical methods:

<u>Parameter</u>	<u>Analytical Method</u>
VOCs	SW-846 8260B
SVOCs	SW-846 8270C
Pentachlorophenol	SW-846 8270C and SIM
Pesticides/PCBs	EPA 608/SW-846 8081/8082
Metals (Excluding Mercury)	SW-846 6010
General Water Quality	
Parameters (TSS and BOD-5)	EPA 160.2 and 405.1
Mercury	SW-846 7470
pH	EPA 150.1

## 2.3 EFFLUENT ANALYTICAL RESULTS

### 2.3.1 GWTP Effluent Samples

The GWTP effluent monitoring data, summarized in Table 2.2, verify that the system effluent was compliant with the discharge limits summarized in Table 2.1. No effluent exceedences were reported in the October, November, or December samples.

Compuchem Laboratory of Cary, North Carolina performed the analysis of the samples. Laboratory Data Consultants (LDC) of Carlsbad, California performed third party data validation in accordance with the U.S. EPA National Functional Guidelines for Organic/Inorganic Data Review. Validation qualifiers are listed in Table 2.2 and are written in the margin of the analytical data sheets provided in Appendix A.

## **3.0 ISVE SYSTEM MONITORING**

### **3.1 THERMAL OXIDIZER OFF-GAS SAMPLING**

In October 2004, repairs were completed to thermal oxidizer/scrubber unit 1 (Therm Ox 1). The unit was started on October 7th, treating vapors from the Off-Site ISVE system. In November and December of 2004, Therm Ox 1 was used to treat vapors from the SBPA ISVE system. Thermal oxidizer/scrubber unit 2 (Therm Ox 2) was used to treat vapors from the SBPA ISVE system and aeration tank T-102 during October 2004 and then to treat vapors from the Off-Site ISVE system and T-102 in November and December of 2004. During the fourth quarter of 2004, compliance samples were collected from both thermal oxidizer/scrubber units on October 14th, November 11th, and December 17th.

Influent and effluent off-gas samples were collected directly from sampling taps on the influent pipe to the thermal oxidizer and the discharge stack of the scrubber. One influent sample (labeled IN1) and one effluent sample (EF1) were collected. A duplicate influent sample (IN2) was also collected. The samples were collected to comply with the PSVP and QAPP and in accordance with laboratory guidelines. The VOC samples were collected using a summa canister and the SVOC samples were collected in sorbent tubes.

**Sampling Frequency Schedule – ISVE System**

<b>Startup</b>	Weekly for a four week period
<b>Post-Startup</b>	Monthly in accordance with the IDEM Air Permit Equivalency

Following sample collection, the SVOC sample containers were maintained at or below 4°C in coolers. Chain-of-Custody forms were prepared to track the transfer of samples from the treatment system to the laboratories for extraction and analysis. In accordance with the approved QAPP, the off-gas samples were analyzed by the following analytical methods:

<b><u>Parameter</u></b>	<b><u>Analytical Method</u></b>
VOCs	TO-14
SVOCs	TO-13

### **3.2 SAMPLING RESULTS**

The influent and effluent off-gas data are summarized in Tables 3.1 through 3.12 and verify that the off-gas from both of the thermal oxidizers were less than the IDEM discharge limit of three pounds of VOCs per hour for October, November, and December. For example, the VOC discharge reported from the November 11, 2004 Therm Ox 2 sample was 0.027 pounds per hour, approximately one percent of the discharge limit. The VOC discharge from the November 11, 2004 Therm Ox 1 sample was 0.012 pounds per hour, less than one percent of the discharge limit. The results for October and December were within the same order of

magnitude. The analytical data sheets for the compliance samples are provided in Appendix B.

In addition to the off-gas data collected during the fourth quarter, MWH collected off-gas samples from the Off-Site ISVE system and the SBPA ISVE system influent lines. These samples were collected in order to monitor the performance of these systems and are not needed to comply with compliance requirements. The data from this monitoring is summarized in Tables 3.1 through 3.12.

Air Toxics Laboratories of Folsom, California analyzed the samples. The analytical results are summarized in Tables 3.1 through 3.12. Laboratory Data Consultants of Carlsbad, California performed data validation in accordance with the QAPP and the National Functional Guidelines for Organic/Inorganic Data Review. Validation qualifiers are listed in the tables and are written in the margin of the analytical data sheets provided in Appendix B.

### **3.3 ISVE SYSTEM MONITORING**

Performance monitoring of the ISVE system was conducted in accordance with the PSVP (Montgomery Watson, June 1999). Extracted vapor flow rates and vacuums at individual ISVE wells and headers were collected on a routine basis. Additionally, VOC concentrations were measured at individual wells and headers using a photo ionization detector (PID).

The information collected during performance monitoring is used to evaluate and optimize the ISVE system. Data collected from the Off-Site ISVE system during the fourth quarter of 2004 is presented in Tables 3.13 and 3.14. Data that was collected from the SBPA ISVE system during the fourth quarter of 2004 is presented in Tables 3.15 and 3.16.

#### **4.0 GWTP TREATMENT SYSTEM PROCESS MODIFICATIONS**

There were no modifications to the GWTP during the Fourth Quarter 2004.

In December 2004, the U.S. EPA received a complaint from a local resident on noise, which he believed to be produced by the GWTP. The U.S. EPA forwarded MWH the name and phone number of the concerned citizen to MWH and on December 23rd invited the resident to the site to identify the specific source of the noise. Together they identified that the blowers positioned outside of the GWTP are causing the unwanted noise heard from several residences located west of the GWTP. MWH is currently evaluating noise abatement alternatives that can be installed before spring 2005.

## **5.0 ISVE PROCESS MODIFICATIONS**

During maintenance of Therm Ox 2 in September 2004 it was noticed that portions of the packing material in the unit were damaged. Replacement packing was ordered and Therm Ox 2 was temporarily shut down on October 4th while the new packing was installed and other maintenance was performed. The unit was brought back online October 5th.

The expansion equipment for the Off-Site ISVE system was brought on line on November 4th and the Off-Site ISVE system has been operating with a vapor collection capacity of approximately 2,000 cubic feet per minute (CFM). On November 23rd, Mompar Insulation was on site to install insulation for the new blower shed in the Off-Site Area. On November 24th, an additional 14 ISVE wells were activated in the Off-Site Area, bringing the total number of operating wells to 28. On December 2nd, the air sparge systems were activated. All air sparge points were activated in both the Off-Site Area and SBPA.

## **6.0 PGCS AND BWES GAUGING ACTIVITIES**

The PGCS groundwater extraction trenches were operated in "auto" mode during the fourth quarter of 2004 during operational periods of the GWTP. In "auto" mode, the PGCS extraction wells pump continuously unless there is a low water level in individual extraction wells or a high water level in Aeration Equalization Tank (T-102). This mode is used to control the flowrate through the treatment system while at the same time creating an inward gradient along the PGCS trench. The GWTP also received influent from the On-Site and Off-Site components of the BWES and the SBPA DPE wells during the fourth quarter of 2004.

In accordance with the PSVP for the Site, a discussion on the effect of the PGCS and BWES on the water table near the Site is presented in each quarterly monitoring report. This section summarizes the groundwater elevations at the site during October, November, and December 2004. Groundwater elevation measurements were collected throughout the Site on December 21, 2004 as part of the groundwater monitoring program. The groundwater elevations are listed in Table 6.1 and the resulting contours outside the barrier wall are shown on Figure 6.1.

The barrier wall was constructed to contain a contaminated zone under the Site, and the BWES was installed to extract groundwater from within the barrier wall and dewater the Site for the ISVE system. Eight pairs of piezometers were installed, with one piezometer of each pair on either side of the barrier wall, spaced along the barrier wall alignment. This allows measurement and tracking of water levels in order to document that the barrier wall is serving its designed function.

In November 2004, two shallow piezometers (P93R and P94R) were installed to replace a pair of damaged piezometers (P93 and P94) that originally were situated just inside and outside the barrier wall along the west edge of the On-Site Area. These piezometers were installed using a direct push technology rig, and were constructed of 1-inch outside diameter schedule 40 polyvinyl chloride materials with a 5-foot long "pre-packed" screened interval. The screens were installed to a total depth of about 17 feet below ground surface, which is near the bottom of the upper aquifer in this area of the Site. The piezometers were constructed as above-ground completions, and were surrounded by protective bollards.

Table 6.1, BWES Water Level and Piezometer Pairs, presents the groundwater elevations inside and outside the barrier wall on December 21, 2004. The groundwater elevations are illustrated on Figure 6.2. The groundwater elevation measurements were 1.47 to 9.73 feet higher outside the barrier wall. In general, the data demonstrates that the barrier wall is successfully performing the intended function of isolating and protecting the groundwater outside the barrier wall from the source areas of the Site inside the barrier wall. MWH will continue to periodically collect water level measurements across the Site as required in the PSVP.

As part of the optimization of the GWTP and BWES upgrades, MWH began active dewatering of the Off-Site Area through increased groundwater pumping rates on September 25, 2001. Active dewatering of the SBPA began on February 11, 2003 with the addition of the DPE wells. Water levels were regularly measured throughout the quarter at five piezometers in the On-Site Area (P29, P31, P32, P36, and P49) and at seven piezometers and three air sparge wells in the Off-Site Area (P96, P110, P112, P113, P114, P116, P118, AS-7, AS-8, and AS-9). The water level trend data from these piezometers and AS wells are depicted graphically on Figures 6.3 and 6.4, which also reference the target water elevations for each area. In the SBPA the target water level is 629 feet amsl. The water levels in these piezometers and wells throughout much of the On-site area were above this target. However, piezometer, P-36, which is in the center of the ISVE area indicates that the water level within the ISVE area is approximately four feet below the target.

In the Off-site ISVE area, the target water level is 626 feet amsl. Actual water levels varied from 621 feet amsl to 630 feet amsl. This represents an increase over historic water levels. It is believed that the primary cause of this increase is the result of upwelling caused by the ISVE vacuum and the fact that multiple BWES pumps required maintenance and were not operated during the beginning of the quarter. The five BWES pumps were repaired in November. MWH will continue to monitor the water levels to ensure vapor extraction at the ISVE wells is not inhibited.

## **7.0 SYSTEM OPERATION**

The GWTP operated as designed for approximately 95 percent of the fourth quarter of 2004 (based on days of operation). The system drew influent from the On-Site Area BWES, the Off-Site Area BWES, the PGCS, MW-10C and MW-56.

The Off-Site Area ISVE system continued to operate as designed for approximately 90 percent of the fourth quarter of 2004 (based on days of operation). The SBPA ISVE system continued to operate as designed for approximately 92 percent of the fourth quarter of 2004 (based on days of operation).

## 8.0 REFERENCES

1. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, July 1997.
2. *Performance Standard Verification Plan, ACS NPL Site*, Montgomery Watson, June 1999.
3. *Phase I Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, July 1996.
4. *Phase II Technical Memorandum Wetland Investigation, ACS NPL Site*, Montgomery Watson, February 1997.
5. *Quality Assurance Project Plan, ACS NPL Site*, Montgomery Watson Harza, March 2001.
6. *U.S. EPA Specifications and Guidance for Obtaining Contaminant-Free Sample Containers*, United States Environmental Protection Agency, 1992.

ALC/RAA/PJV/jmf  
J:\209\0603 ACS\0301 GWTP\6030301a132.doc  
2090603.030101

**Table 2.1**  
**Groundwater Treatment System Effluent Discharge Limits**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Quality Parameter	Effluent Standard (Limit)
<b>General Water Quality Parameters</b>	
pH	6 - 9 S.U.
BOD-5	30 mg/L
TSS	30 mg/L
<b>Inorganics</b>	
Arsenic	50 µg/L
Beryllium	NE
Cadmium	4.1 µg/L
Manganese	NE
Mercury	0.02 µg/L (w/DL = 0.64)
Selenium	8.2 µg/L
Thallium	NE
Zinc	411 µg/L
<b>Volatile Organics</b>	
Acetone	6,800 µg/L
Benzene	5 µg/L
2-Butanone	210 µg/L
Chloromethane	NE
1,4 – Dichlorobenzene	NE
1,1 – Dichloroethane	NE
1,2 – Dichloroethene – cis	70 µg/L
Ethylbenzene	34 µg/L
Methylene chloride	5 µg/L
Tetrachloroethene	5 µg/L
Trichloroethene	5 µg/L
Vinyl chloride	2 µg/L
4 – Methyl - 2 – pentanone	15 µg/L
<b>Semi-Volatile Organics</b>	
bis(2 – Chloroethyl) ether	9.6 µg/L
bis(2 – Ethylhexyl) phthalate	6 µg/L
Isophorone	50 µg/L
4 – Methylphenol	34 µg/L
Pentachlorophenol	1 µg/L
<b>PCBs</b>	
PCBs	0.00056 µg/L (w/DL = 0.1 to 0.9)

**Notes:**

NE = No effluent limit established.

DL = Detection limit

S.U. = Standard pH units

µg/L = micrograms per Liter

mg/L = milligrams per Liter

**Table 2.2**  
**Summary of Effluent Analytical Results - Fourth Quarter 2004**  
**Groundwater Treatment System**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Event Date	units	Month 89 10/19/2004	Month 90 11/30/2004	Month 91 12/15/2004	Effluent Limits	Lab Reporting Limits
pH	S.U.	7.43	7.30 J	7.32 J	6-9	none
TSS	mg/L	1.87	NS	NS	30	10
BOD	mg/L	< 2	NS	NS	30	2
Arsenic	ug/L	16	NS	NS	50	3.4
Beryllium	ug/L	ND	NS	NS	NE	0.2
Cadmium	ug/L	ND	NS	NS	4.1	0.3
Manganese	ug/L	16.1 /B	NS	NS	NE	10
Mercury	ug/L	ND	NS	NS	0.02 (w/DL = 0.64)	0.64
Selenium	ug/L	ND	NS	NS	8.2	4.3
Thallium	ug/L	ND	NS	NS	NE	5.7
Zinc	ug/L	ND	NS	NS	411	1.2
Benzene	ug/L	ND	0.13 J/J	ND	5	0.5
Acetone	ug/L	ND /UJ	1.9 J/ 2.5 UBJ	1.5 JB/ 2.5 UB	6,800	3
2-Butanone	ug/L	ND	ND	4.1	210	3
Chloromethane	ug/L	ND /UJ	ND	ND	NE	0.5
1,4-Dichlorobenzene	ug/L	ND	ND	ND	NE	0.5
1,1-Dichloroethane	ug/L	ND	ND	ND	NE	0.5
cis-1,2-Dichloroethylene	ug/L	0.24 J/J	0.55	ND	70	0.5
Ethylbenzene	ug/L	ND	ND	ND	34	0.5
Methylene chloride	ug/L	0.14 J/J	0.8	0.98	5	0.6
Tetrachloroethylene	ug/L	ND	0.5	ND	5	0.5
Trichloroethylene	ug/L	ND	0.12 J/J	ND	5	0.5
Vinyl chloride	ug/L	ND	ND	ND	2	0.5
4-Methyl-2-pentanone	ug/L	ND	ND	ND	15	3
bis (2-Chloroethyl) ether	ug/L	ND	NS	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	ug/L	ND	NS	NS	6	6
4 - Methylphenol	ug/L	ND	NS	NS	34	10
Isophorone	ug/L	ND	NS	NS	50	10
Pentachlorophenol	ug/L	ND	NS	NS	1	1
PCB/Aroclor-1016	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	ug/L	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5

**Notes:**

- Bolded result** indicates a exceedence of the discharge limit
- S.U. = Standard pH units
- mg/L = milligrams per liter
- ug/L = micrograms per liter
- ND = Not detected
- NS = This analyte was not sampled or analyzed for
- NE = No effluent limit established.
- DL = Detection limit
- \* = Approved SW-846 method is incapable of achieving effluent limit.

**Suffix Definitions:**

- / = Data qualifier added by laboratory
- / = Data qualifier added by data validator
- J = Result is estimated
- B = Compound is also detected in the blank
- UJ = Indicates the compound or analyte was analyzed for but not detected.  
The sample detection limit is an estimated value.
- JB = Result is detected below the reporting limit and is an estimated concentration.  
The compound is also detected in the method blank resulting in a potential high bias.
- UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination.
- UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination,  
however the calibration was out of range. Therefore the concentration is estimated.

**Table 3.1**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-14 (VOCs) - October 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 10/14/04						Destruction Efficiency		
		Therm-Ox 2		Effluent EF1						
		Off-Site IN1	Influent IN1	Influent IN2	Effluent EF1	Low	High	Average		
1,1,1-Trichloroethane	ppbv	43,000	/J	330	/J	8,500	63	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	ND	U/UJ	44	/J	ND	U	ND	U	NC
1,1,2-Trichloroethane	ppbv	ND	U/UJ	21	/J	66	J/J	0.32	J/J	NC
1,1-Dichloroethane	ppbv	3,800	/J	200	/J	1,400		11		NC
1,1-Dichloroethene	ppbv	1,700	J/J	21	/J	150		3.9		NC
1,2-Dichloroethane	ppbv	ND	U/UJ	100	/J	300		1.9		NC
1,2-Dichloropropane	ppbv	1,100	J/J	53	/J	120	J/J	0.71		NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	1,800	J/J	710	/J	2,500		36		NC
2-Hexanone	ppbv	ND	U/UJ	ND	U/UJ	73	J/J	0.92	J/J	NC
4-Methyl-2-pentanone	ppbv	3,200	J/J	2,200	/J	1,800		12		NC
Acetone	ppbv	3,200	J/J	3,800	/J	3,700		52		NC
Benzene	ppbv	26,000	/J	900	/J	6,400		56		NC
Bromodichloromethane	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Bromoform	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Bromomethane	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Carbon Disulfide	ppbv	ND	U/UJ	ND	U/UJ	ND	U	0.2	J/J	NC
Carbon Tetrachloride	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Chlorobenzene	ppbv	540	J/J	11	J	ND	U	0.22	J/J	NC
Chloroethane	ppbv	ND	U/UJ	60	/J	200		11		NC
Chloroform	ppbv	3,900	/J	59	/J	480		4.7		NC
Chloromethane	ppbv	ND	U/UJ	ND	U/UJ	ND	U	2.4	J/J	NC
cis-1,2-Dichloroethene	ppbv	53,000	/J	4,000	/J	6,500		49		NC
cis-1,3-Dichloropropene	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Dibromochloromethane	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Ethyl Benzene	ppbv	77,000	/J	1,000	/J	5,000		36		NC
m,p-Xylene	ppbv	400,000	/J	5,100	/J	22,000		160		NC
Methylene Chloride	ppbv	11,000	/J	230	/J	8,100		44		NC
o-Xylene	ppbv	150,000	/J	2,700	/J	7,800		55		NC
Styrene	ppbv	ND	U/UJ	ND	U/UJ	ND	U	3.3		NC
Tetrachloroethene	ppbv	150,000	/J	1,100	/J	8,200		72		NC
Toluene	ppbv	470,000	/J	6,500	/J	38,000		270		NC
trans-1,2-Dichloroethene	ppbv	ND	U/UJ	7.7	J/J	45	J/J	0.72	J/J	NC
trans-1,3-Dichloropropene	ppbv	ND	U/UJ	ND	U/UJ	ND	U	ND	U	NC
Trichloroethene	ppbv	44,000	/J	510	/J	5,500		44		NC
Vinyl Chloride	ppbv	2,100	J/J	100	/J	540		26		NC
<b>Total</b>	ppbv	<b>1,445,340</b>		<b>29,757</b>		<b>127,374</b>		<b>1,016</b>		<b>96.58%</b>
<b>Total</b>	lb/hr	<b>24.35</b>		<b>0.44</b>		<b>2.03</b>		<b>0.016</b>		<b>96.42%</b>
										<b>99.20%</b>
										<b>97.89%</b>
										<b>99.22%</b>
										<b>97.82%</b>

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Non-detect

NC = Not calculated

ppbv = parts per billion volume

lb/hr = pounds per hour

Destruction efficiencies were not calculated if either influent samples or the effluent sample was estimated.

The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

10/14/04 VOCs in lb/hr calculated based on Offsite: 996 scfm, 66 degrees Fahrenheit and Onsite: 1179 scfm, 62 degrees Fahrenheit (10/20/04).

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Table 3.2**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-14 (VOCs) - November 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 11/11/2004							
		Therm-Ox 2				Destruction Efficiency			
		Off-Site IN1	Influent IN1	Influent IN2	Effluent EF1	Low	High	Average	
1,1,1-Trichloroethane	ppbv	64,000	51,000	59,000	46	99.91%	99.92%	99.92%	
1,1,2,2-Tetrachloroethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
1,1,2-Trichloroethane	ppbv	420 J/J	300 J/J	350 J/J	0.3 J/J	NC	NC	NC	
1,1-Dichloroethane	ppbv	7,500	6,300	6,900	24	99.62%	99.65%	99.64%	
1,1-Dichloroethene	ppbv	250 J/J	350 J/J	220 J/J	1.7	NC	NC	NC	
1,2-Dichloroethane	ppbv	1,900	1,600	1,700	2.4	99.85%	99.86%	99.85%	
1,2-Dichloropropane	ppbv	740 J/J	620 J/J	650 J/J	2.2	NC	NC	NC	
2-Butanone (Methyl Ethyl Ketone)	ppbv	50,000	42,000	44,000	ND U	100.00%	100.00%	100.00%	
2-Hexanone	ppbv	1,600 J/J	1,300 J/J	1,300 J/J	ND U	NC	NC	NC	
4-Methyl-2-pentanone	ppbv	20,000	17,000	18,000	18	99.89%	99.90%	99.90%	
Acetone	ppbv	67,000	68,000	58,000	30	99.95%	99.96%	99.95%	
Benzene	ppbv	34,000	28,000	31,000	110	99.61%	99.65%	99.63%	
Bromodichloromethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Bromoform	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Bromomethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Carbon Disulfide	ppbv	1,200 J/J	910 J/J	990 J/J	ND U	NC	NC	NC	
Carbon Tetrachloride	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Chlorobenzene	ppbv	ND U	ND U	ND U	0.4 J/J	NC	NC	NC	
Chloroethane	ppbv	ND U	ND U	ND U	19	NC	NC	NC	
Chloroform	ppbv	3,700	2,700	3,200	3.9	99.86%	99.88%	99.87%	
Chloromethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
cis-1,2-Dichloroethene	ppbv	5,700	6,400	6,700	400	93.75%	94.03%	93.89%	
cis-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Dibromochloromethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Ethyl Benzene	ppbv	30,000	26,000	28,000	36	99.86%	99.87%	99.87%	
m,p-Xylene	ppbv	130,000	110,000	120,000	150	99.86%	99.88%	99.87%	
Methylene Chloride	ppbv	66,000	57,000	60,000	17	99.97%	99.97%	99.97%	
o-Xylene	ppbv	46,000	39,000	43,000	58	99.85%	99.87%	99.86%	
Styrene	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Tetrachloroethene	ppbv	47,000	40,000	43,000	97	99.76%	99.77%	99.77%	
Toluene	ppbv	280,000	230,000	250,000	270	99.88%	99.89%	99.89%	
trans-1,2-Dichloroethene	ppbv	ND U	ND U	ND U	1.8 J/J	NC	NC	NC	
trans-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	
Trichloroethene	ppbv	34,000	28,000	32,000	43	99.85%	99.87%	99.86%	
Vinyl Chloride	ppbv	340 J/J	ND U	320 J/J	36	NC	NC	NC	
Total	ppbv	891,350	756,490	808,330	1,367	99.82%	99.83%	99.83%	
Total	lb/hr	16.37	14.80	15.98	0.027	99.81%	99.83%	99.82%	

**Notes:**  
 / = Laboratory data qualifier  
 /\_ = Data validation qualifier  
 ND = Non-detect  
 NC = Not calculated  
 ppbv = parts per billion volume  
 lb/hr = pounds per hour

**Qualifiers:**  
 J = Result is estimated  
 U = Below reported quantitation limit

Destruction efficiencies are not calculated if either influent or effluent samples are estimated.  
 Destruction efficiencies are not calculated if the effluent concentration is greater than either of the influent concentrations.  
 The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UF qualifiers).  
 11/11/04 VOCs in lb/hr calculated based on Offsite: 1191 scfm, 70 degrees Fahrenheit and Onsite: 1277 scfm, 54 degrees Fahrenheit (11/24/04).  
 Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Table 3.3**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-14 (VOCs) - December 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 12/17/04						Destruction Efficiency		
		Therm-Ox 2						Low	High	Average
1,1,1-Trichloroethane	ppbv	42,000	42,000	53,000	80			99.81%	99.85%	99.83%
1,1,2,2-Tetrachloroethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	NC	NC
1,1,2-Trichloroethane	ppbv	210 J/J	220 J/J	260.0 J/J	0.79 J/J	NC	NC	NC	NC	NC
1,1-Dichloroethane	ppbv	4,600	4,600	5,700	27			99.41%	99.53%	99.47%
1,1-Dichloroethene	ppbv	220 J/J	240 J/J	300.0 J/J	110			NC	NC	NC
1,2-Dichloroethane	ppbv	1,200	1,100	1,500.0	3.6			99.67%	99.76%	99.72%
1,2-Dichloropropane	ppbv	390 J/J	400 J/J	500.0 J/J	2.4			NC	NC	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	26,000	8,600	31,000	54			99.37%	99.83%	99.60%
2-Hexanone	ppbv	880 J/J		U 1,200 J/J	2.4 J/J	NC	NC	NC	NC	NC
4-Methyl-2-pentanone	ppbv	15,000	2,000 J/J	18,000	22			NC	NC	NC
Acetone	ppbv	26,000	13,000	31,000	74			99.43%	99.76%	99.60%
Benzene	ppbv	21,000	21,000	26,000	380			98.19%	98.54%	98.36%
Bromodichloromethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	NC	NC
Bromoform	ppbv	ND U	ND U	ND U	0.54 J/J	NC	NC	NC	NC	NC
Bromomethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	NC	NC
Carbon Disulfide	ppbv	ND U	ND U	ND U	8.4			NC	NC	NC
Carbon Tetrachloride	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	NC	NC
Chlorobenzene	ppbv	ND U	ND U	ND U	9.0			NC	NC	NC
Chloroethane	ppbv	ND U	ND U	ND U	16			NC	NC	NC
Chloroform	ppbv	2,100	2,200	2,800.0	8.3			99.62%	99.70%	99.66%
Chloromethane	ppbv	ND U	ND U	ND U	49			NC	NC	NC
cis-1,2-Dichloroethene	ppbv	5,200	4,900	3,800	380			90.00%	92.24%	91.12%
cis-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	1.9			NC	NC	NC
Dibromochloromethane	ppbv	ND U	ND U	ND U	ND U	NC	NC	NC	NC	NC
Ethyl Benzene	ppbv	19,000	20,000	25,000	85			99.58%	99.66%	99.62%
m,p-Xylene	ppbv	88,000	95,000	120,000	310			99.67%	99.74%	99.71%
Methylene Chloride	ppbv	34,000	35,000	44,000	84			99.76%	99.81%	99.78%
o-Xylene	ppbv	31,000	34,000	43,000	190			99.44%	99.56%	99.50%
Styrene	ppbv	1,700	ND U	ND U	38			NC	NC	NC
Tetrachloroethene	ppbv	30,000	32,000	39,000	440			98.63%	98.87%	98.75%
Toluene	ppbv	170,000	180,000	230,000	530			99.71%	99.77%	99.74%
trans-1,2-Dichloroethene	ppbv	ND U	ND U	ND U	43			NC	NC	NC
trans-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	1.9			NC	NC	NC
Trichloroethene	ppbv	21,000	21,000	27,000	140			99.33%	99.48%	99.41%
Vinyl Chloride	ppbv	230 J/J	ND U	170 J/J	82			NC	NC	NC
Total	ppbv	539,730	517,260	703,230	3,173			99.39%	99.55%	99.47%
Total	lb/hr	10.25	12.49	16.65	0.077			99.38%	99.54%	99.46%

**Notes:**

/ = Laboratory data qualifier  
/\_ = Data validation qualifier  
ND = Non-detect  
NC = Not calculated  
ppbv = parts per billion volume  
lb/hr = pounds per hour

Destruction efficiencies are not calculated if either influent or effluent samples are estimated.

Destruction efficiencies are not calculated if the effluent concentration is greater than either of the influent concentrations.

The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

12/17/04 VOCs in lb/hr calculated based on Offsite: 1192 scfm, 64 degrees Fahrenheit and Onsite: 906 scfm, 54 degrees Fahrenheit (12/21/04).

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Qualifiers:**

J = Result is estimated  
U = Below reported quantitation limit

**Table 3.4**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - October 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

Compounds	Units	Sampled 10/14/2004								Destruction Efficiency		
		Therm-Ox 2								Low	High	Average
		Off-Site IN1	Influent IN1	Influent IN2	Effluent EFI	ND	U	ND	U			
1,2,4-Trichlorobenzene	µg	ND	U	0.75 J/J	0.76 J/J	ND	U	NC	NC	NC	NC	NC
1,2-Dichlorobenzene	µg	260		30		21		ND	U	100.00%	100.00%	100.00%
1,3-Dichlorobenzene	µg	18		ND	U	ND	U	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	46		3.9		3		ND	U	100.00%	100.00%	100.00%
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,4-Dimethylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC	NC	NC
2-Methylnaphthalene	µg	87		69		63		0.39 J/J		NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Methylphenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	0.35 J/J	0.36 J/J	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)anthracene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)pyrene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	ND	U	0.7 J/J	0.46 J/J	44		ND	U	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND	U	ND	U	1.2 J/J	4 J/J	ND	U	NC	NC	NC
Butylbenzylphthalate	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Diethylphthalate	µg	1.3 J/JB	0.41 J/JB	0.86 J/JB	2.7 J/JB	ND	U	ND	U	NC	NC	NC
Dimethylphthalate	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
di-n-Butylphthalate	µg	ND	U	0.38 J/J	ND	U	0.97 J/J	ND	U	NC	NC	NC
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	13		2.7		2		ND	U	100.00%	100.00%	100.00%
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	ND	U	7		5.5		ND	U	100.00%	100.00%	100.00%
Naphthalene	µg	260		71		53		0.48 J/J		NC	NC	NC
Nitrobenzene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	685.3		186.19		151.14		52.54		65.24%	71.78%	68.51%

**Table 3.4**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - October 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier  
/\_ = Data validation qualifier  
ND = Non-detect  
NC = Not calculated  
µg = micrograms

The total concentration was calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated. Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated  
U = Below reported quantitation limit  
B = The compound was detected in an associated blank  
JB = Analyte is detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

**Table 3.5**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - November 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

Compounds	Units	Sampled 11/11/2004						Destruction Efficiency		
		Therm-Ox 2								
		Off-Site IN1	Influent IN1	Influent IN2	Effluent EF1	Low	High	Average		
1,2,4-Trichlorobenzene	µg	3.1	2.90	3.3	ND U	100.00%	100.00%	100.00%		
1,2-Dichlorobenzene	µg	120	100	100	ND U	100.00%	100.00%	100.00%		
1,3-Dichlorobenzene	µg	4.6	3.7	3.4	ND U	100.00%	100.00%	100.00%		
1,4-Dichlorobenzene	µg	17	14.0	13	ND U	100.00%	100.00%	100.00%		
2,4,5-Trichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4,6-Trichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dimethylphenol	µg	2	J/J	ND U	1.7 J/J	ND U	NC	NC	NC	
2,4-Dinitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dinitrotoluene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,6-Dinitrotoluene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Chloronaphthalene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Chlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Methylnaphthalene	µg	18	14	17	ND U	100.00%	100.00%	100.00%		
2-Methylphenol (o-Cresol)	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Nitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
3,3'-Dichlorobenzidine	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
3-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4,6-Dinitro-2-methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Bromophenyl-phenyl Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chloro-3-methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chloroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chlorophenyl-phenyl Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Nitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Acenaphthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Acenaphthylene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benzo(a)anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benzo(a)pyrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benzo(b)fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benzo(g,h,i)perylene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benzo(k)fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Chloroethoxy) Methane	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Chloroethyl) Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Ethylhexyl)phthalate	µg	0.65	J/J	1.1 J	ND U	1.3 J	NC	NC	NC	
Butylbenzylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Chrysene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Dibenz(a,h)anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Dibenzo furan	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Diethylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Dimethylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
di-n-Butylphthalate	µg	ND U	0.37	J/B	0.33 J/B	ND U	NC	NC	NC	
Di-n-Octylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Fluorene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Hexachlorobenzene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Hexachlorobutadiene	µg	8.2	7.4	7.3	ND U	100.00%	100.00%	100.00%		
Hexachlorocyclopentadiene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Hexachloroethane	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Indeno(1,2,3-c,d)pyrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Isophorone	µg	36	30	32	ND U	100.00%	100.00%	100.00%		
Naphthalene	µg	95	94	100	ND U	100.00%	100.00%	100.00%		
Nitrobenzene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
N-Nitroso-di-n-propylamine	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
N-Nitrosodiphenylamine	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Pentachlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Phenanthrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Phenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Pyrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Total	µg	304.6	267.47	278.03	1.30	99.51%	99.53%	99.52%		

**Table 3.5**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - November 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Non-detect

NC = Not calculated

µg = micrograms

The total concentration was calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated. Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated

U = Below reported quantitation limit

B = The compound was detected in an associated blank

JB = Analyte is detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

**Table 3.6**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - December 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

		Sampled 12/17/2004						Destruction Efficiency		
		Therm-Ox 2								
Compounds	Units	Off-Site IN1	Influent IN1	Influent IN2	Effluent EF1	Low	High	Average		
1,2,4-Trichlorobenzene	µg	2.9	1.5	2.0	ND U	100.00%	100.00%	100.00%		
1,2-Dichlorobenzene	µg	89	56	68	1.2	97.86%	98.24%	98.05%		
1,3-Dichlorobenzene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
1,4-Dichlorobenzene	µg	10	6.5	8.0	ND U	100.00%	100.00%	100.00%		
2,4,5-Trichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4,6-Trichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dichlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dimethylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dinitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,4-Dinitrotoluene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2,6-Dinitrotoluene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Chloronaphthalene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Chlorophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Methylisophthalene	µg	17	6.2	8.3	ND U	100.00%	100.00%	100.00%		
2-Methylphenol (o-Cresol)	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
2-Nitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
3,3'-Dichlorobenzidine	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
3-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4,6-Dinitro-2-methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Bromophenyl-phenyl Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chloro-3-methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chloroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Chlorophenyl-phenyl Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Methylphenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Nitroaniline	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
4-Nitrophenol	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Acenaphthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Acenaphthylene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benz(a)anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benz(a)pyrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benz(b)fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benz(g,h,i)perylene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Benz(k)fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Chlorooxy) Methane	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Chloroethyl) Ether	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
bis(2-Ethylhexyl)phthalate	µg	1.7	J/B	0.91	J/B	1.1	J/B	1.0	J/B	NC
Butylbenzylphthalate	µg	0.70	J/B	0.36	J/B	0.56	J/B	0.79	J/B	NC
Chrysene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Dibenz(a,h)anthracene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Dibenzo furan	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Diethylphthalate	µg	0.68	J/B	ND U	ND U	0.28	J/B	NC	NC	NC
Dimethylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
di-n-Butylphthalate	µg	0.85	J/B	0.48	J/B	0.33	J/B	0.79	J/B	NC
Di-n-Octylphthalate	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Fluoranthene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Fluorene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Hexachlorobenzene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Hexachlorobutadiene	µg	4.7		2.8	3.4	ND U	100.00%	100.00%	100.00%	
Hexachlorocyclopentadiene	µg	0.30	J/J	ND U	ND U	ND U	NC	NC	NC	
Hexachloroethane	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Indeno(1,2,3-c,d)pyrene	µg	ND U	ND U	ND U	ND U	NC	NC	NC		
Isophorone	µg	36		20	26	ND U	100.00%	100.00%	100.00%	
Naphthalene	µg	74		42	55	0.57	J/J	NC	NC	NC
Nitrobenzene	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
N-Nitroso-di-n-propylamine	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
N-Nitrosodiphenylamine	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
Pentachlorophenol	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
Phenanthrene	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
Phenol	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
Pyrene	µg	ND U	ND U	ND U	ND U	ND U	NC	NC	NC	
Total	µg	237.8		136.75	172.69	4.63	96.61%	97.32%	96.97%	

**Table 3.6**  
**Off-Site ISVE System and Thermal Oxidizer 2 Results**  
**for Method TO-13 (SVOCs) - December 2004**  
**American Chemical Service NPL Site, Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier  
/\_ = Data validation qualifier  
ND = Non-detect  
NC = Not calculated  
µg = micrograms

The total concentration was calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated. Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated  
U = Below reported quantitation limit  
B = The compound was detected in an associated blank

**Table 3.7**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-14 (VOCs) – October 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 10/14/04					
		Therm-Ox 1			Destruction Efficiency		
	On-Site IN1	On-Site IN2	Effluent Eff1	Low	High	Average	
1,1,1-Trichloroethane	ppbv	63,000	/J	64,000	/J	64	NC NC NC
1,1,2,2-Tetrachloroethane	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
1,1,2-Trichloroethane	ppbv	460	J/J	470	J	ND U	NC NC NC
1,1-Dichloroethane	ppbv	10,000	/J	10,000	/J	ND U	NC NC NC
1,1-Dichloroethene	ppbv	2,300	/J	2,300	/J	2.6	NC NC NC
1,2-Dichloroethane	ppbv	2,400	/J	2,600	/J	ND U	NC NC NC
1,2-Dichloropropane	ppbv	820	J/J	730	J/J	ND U	NC NC NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	22,000	J/J	21,000	/J	4.4	NC NC NC
2-Hexanone	ppbv	820	J/J	ND	U/UJ	0.84	J/J NC NC NC
4-Methyl-2-pentanone	ppbv	15,000	/J	13,000	/J	0.58	J/J NC NC NC
Acetone	ppbv	48,000	/J	46,000	/J	22	NC NC NC
Benzene	ppbv	42,000	/J	42,000	/J	1.1	NC NC NC
Bromodichloromethane	ppbv	ND	U/UJ	ND	U/UJ	0.34	J/J NC NC NC
Bromoform	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Bromomethane	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Carbon Disulfide	ppbv	ND	U/UJ	ND	U/UJ	0.93	J/J NC NC NC
Carbon Tetrachloride	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Chlorobenzene	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Chloroethane	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Chloroform	ppbv	3,600	/J	3,700	/J	0.52	J/J NC NC NC
Chloromethane	ppbv	ND	U/UJ	580	J/J	ND U	NC NC NC
cis-1,2-Dichloroethene	ppbv	6,000	/J	6,200	/J	5.6	NC NC NC
cis-1,3-Dichloropropene	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Dibromochloromethane	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Ethyl Benzene	ppbv	33,000	/J	28,000	/J	1.3	NC NC NC
m,p-Xylene	ppbv	140,000	/J	120,000	/J	5.8	NC NC NC
Methylene Chloride	ppbv	94,000	/J	96,000	/J	0.42	J/JB NC NC NC
o-Xylene	ppbv	47,000	/J	41,000	/J	2.1	NC NC NC
Styrene	ppbv	2,400	/J	2,100	/J	0.12	J/J NC NC NC
Tetrachloroethene	ppbv	52,000	/J	47,000	/J	1.8	NC NC NC
Toluene	ppbv	300,000	/J	280,000	/J	2.9	NC NC NC
trans-1,2-Dichloroethene	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
trans-1,3-Dichloropropene	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Trichloroethene	ppbv	42,000	/J	40,000	/J	0.58	J/J NC NC NC
Vinyl Chloride	ppbv	ND	U/UJ	ND	U/UJ	ND U	NC NC NC
Total	ppbv	926,800		866,680		117.93	99.99% 99.99% 99.99%
Total	lb/hr	17.39		16.21		0.002	99.99% 99.99% 99.99%

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Not-detect

NC = Not calculated

ppbv = parts per billion volume

lb/hr = pounds per hour

Destruction efficiencies are not calculated if either influent or effluent samples are estimated.

Destruction efficiencies are not calculated if the effluent concentration is greater than either of the influent concentrations.

The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

10/14/04 VOCs in lb/hr calculated based on Offsite: 996 scfm, 66 degrees Fahrenheit and Onsite: 1179 scfm, 62 degrees Fahrenheit (10/20/04).

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Qualifiers:**

J = Result is estimated

U = Below reported quantitation limit

UJ = Compound was analyzed for but not detected.

The sample detection limit is an estimated value.

JB = Analyte is detected in the sample below

the reporting limit and is an estimated

concentration. It is also detected in the

method blank resulting in a potential high bias.

**Table 3.8**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-14 (VOCs) – November 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 11/11/04					
		Therm-Ox 1			Destruction Efficiency		
		On-Site IN1	On-Site IN2	Effluent E/F1	Low	High	Average
1,1,1-Trichloroethane	ppbv	37,000	35,000	30	99.91%	99.92%	99.92%
1,1,2-Tetrachloroethane	ppbv	ND U	ND U	ND U	NC	NC	NC
1,1,2-Trichloroethane	ppbv	400 J/J	400 J/J	0.13 J/J	NC	NC	NC
1,1-Dichloroethane	ppbv	5,300	5,200	10	99.81%	99.81%	99.81%
1,1-Dichloroethene	ppbv	260 J/J	210 J/J	0.9	NC	NC	NC
1,2-Dichloroethane	ppbv	1,200	1,200	0.86	99.93%	99.93%	99.93%
1,2-Dichloropropane	ppbv	630 J/J	690	0.74	NC	NC	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	28,000	29,000	21	99.93%	99.93%	99.93%
2-Hexanone	ppbv	1,700 J/J	1,900 J/J	0.72 J/J	NC	NC	NC
4-Methyl-2-pentanone	ppbv	16,000	17,000	5.7	99.96%	99.97%	99.97%
Acetone	ppbv	34,000	35,000	48	99.86%	99.86%	99.86%
Benzene	ppbv	18,000	19,000	31	99.83%	99.84%	99.83%
Bromodichloromethane	ppbv	ND U	ND U	ND U	NC	NC	NC
Bromoform	ppbv	ND U	ND U	0.24 J/J	NC	NC	NC
Bromomethane	ppbv	ND U	ND U	ND U	NC	NC	NC
Carbon Disulfide	ppbv	ND U	ND U	2.5 J/J	NC	NC	NC
Carbon Tetrachloride	ppbv	ND U	ND U	ND U	NC	NC	NC
Chlorobenzene	ppbv	ND U	ND U	ND U	NC	NC	NC
Chloroethane	ppbv	ND U	ND U	14	NC	NC	NC
Chloroform	ppbv	2,800	2,700	1.8	99.93%	99.94%	99.93%
Chloromethane	ppbv	ND U	ND U	ND U	NC	NC	NC
cis-1,2-Dichloroethene	ppbv	6,000	6,000	130	97.83%	97.83%	97.83%
cis-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	NC	NC	NC
Dibromochloromethane	ppbv	ND U	ND U	ND U	NC	NC	NC
Ethyl Benzene	ppbv	23,000	27,000	6.5	99.97%	99.98%	99.97%
m,p-Xylene	ppbv	110,000	120,000	36	99.97%	99.97%	99.97%
Methylene Chloride	ppbv	44,000	46,000	43	99.90%	99.91%	99.90%
o-Xylene	ppbv	41,000	48,000	38	99.91%	99.92%	99.91%
Styrene	ppbv	ND U	ND U	ND U	NC	NC	NC
Tetrachloroethene	ppbv	38,000	39,000	59	99.84%	99.85%	99.85%
Toluene	ppbv	200,000	200,000	71	99.96%	99.96%	99.96%
trans-1,2-Dichloroethene	ppbv	ND U	ND U	0.86 J/J	NC	NC	NC
trans-1,3-Dichloropropene	ppbv	ND U	ND U	ND U	NC	NC	NC
Trichloroethene	ppbv	25,000	24,000	27	99.89%	99.89%	99.89%
Vinyl Chloride	ppbv	310 J/J	260 J/J	11	NC	NC	NC
Total	ppbv	632,600	657,560	589.95	99.91%	99.91%	99.91%
Total	lb/hr	13.09	13.60	0.012	99.91%	99.91%	99.91%

**Notes:**

J = Laboratory data qualifier

U = Data validation qualifier

ND = Non-detect

NC = Not calculated

ppbv = parts per billion volume

lb/hr = pounds per hour

Destruction efficiencies are not calculated if either influent or effluent samples are estimated.

Destruction efficiencies are not calculated if the effluent concentration is greater than either of the influent concentrations.

The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

11/11/04 VOCs in lb/hr calculated based on Offsite: 1191 scfm, 70 degrees Fahrenheit and Onsite: 1277 scfm, 54 degrees Fahrenheit (11/24/04).

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Qualifiers:**

J = Result is estimated

U = Below reported quantitation limit

**Table 3.9**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-14 (VOCs) – December 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 12/17/04					
		Therm-Ox 1			Destruction Efficiency		
		On-Site IN1	On-Site IN2	Effluent EST1	Low	High	Average
1,1,1-Trichloroethane	ppbv	14,000	19,000	19	99.86%	99.90%	99.88%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	NC	NC	NC
1,1,2-Trichloroethane	ppbv	94	J/J	140	J/J	ND	NC
1,1-Dichloroethane	ppbv	1,800		2,500	2.9	99.84%	99.88%
1,1-Dichloroethene	ppbv	120	J/J	140	J/J	70	NC
1,2-Dichloroethane	ppbv	570		830	ND	U	100.00%
1,2-Dichloropropane	ppbv	270		380	0.34	J/J	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	7,300		11,000	18	99.75%	99.84%
2-Hexanone	ppbv	340	J/J	480	J/J	1.3	J/J
4-Methyl-2-pentanone	ppbv	3,800		5,400	6.3	99.83%	99.88%
Acetone	ppbv	7,000		10,000	48	99.31%	99.52%
Benzene	ppbv	5,100		7,300	140	97.25%	98.08%
Bromodichloromethane	ppbv	ND	U	ND	U	NC	NC
Bromoform	ppbv	ND	U	ND	U	0.21	J/J
Bromomethane	ppbv	ND	U	ND	U	ND	NC
Carbon Disulfide	ppbv	ND	U	ND	U	7.1	NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	0.66	J/J
Chlorobenzene	ppbv	ND	U	ND	U	7.4	NC
Chloroethane	ppbv	ND	U	ND	U	1.2	NC
Chloroform	ppbv	1,100		1,700	3.3	99.70%	99.81%
Chloromethane	ppbv	ND	U	ND	U	21	NC
cis-1,2-Dichloroethene	ppbv	2,400		3,500	63	97.38%	98.20%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	1.6	NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	NC
Ethyl Benzene	ppbv	7,200		9,600	28	99.61%	99.71%
m,p-Xylene	ppbv	36,000		46,000	160	99.56%	99.65%
Methylene Chloride	ppbv	9,800		14,000	35	99.64%	99.75%
o-Xylene	ppbv	14,000		18,000	69	99.51%	99.62%
Styrene	ppbv	ND	U	ND	U	17	NC
Tetrachloroethene	ppbv	13,000		19,000	200	98.46%	98.95%
Toluene	ppbv	60,000		82,000	150	99.75%	99.82%
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	19	NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	1.5	NC
Trichloroethene	ppbv	8,700		12,000	56	99.36%	99.53%
Vinyl Chloride	ppbv	160	J/J	170	J/J	41	NC
Total	ppbv	192,754		263,140	1,187.81	99.38%	99.55%
Total	lb/hr	2.90		3.96	0.018	99.38%	99.55%

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Non-detect

NC = Not calculated

ppbv = parts per billion volume

lb/hr = pounds per hour

Destruction efficiencies are not calculated if either influent or effluent samples are estimated.

Destruction efficiencies are not calculated if the effluent concentration is greater than either of the influent concentrations.

The total concentration and mass loading were calculated using all detected concentrations including estimated detections (denoted with J or UJ qualifiers).

12/17/04 VOCs in lb/hr calculated based on Offsite: 1192 scfm, 64 degrees Fahrenheit and Onsite: 906 scfm, 54 degrees Fahrenheit (12/21/04).

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

**Qualifiers:**

J = Result is estimated

U = Below reported quantitation limit

**Table 3.10**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – October 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 10/14/2004					
		On-Site IN1	On-Site IN2	Effluent EFF1	Low	High	Average
1,2,4-Trichlorobenzene	µg	2.9	4.6	ND U	100.00%	100.00%	100.00%
1,2-Dichlorobenzene	µg	86	140	ND U	100.00%	100.00%	100.00%
1,3-Dichlorobenzene	µg	2.8	4.6	ND U	100.00%	100.00%	100.00%
1,4-Dichlorobenzene	µg	10	17	ND U	100.00%	100.00%	100.00%
2,4,5-Trichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC
2,4-Dichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC
2,4-Dimethylphenol	µg	ND U	8.1	ND U	NC	NC	NC
2,4-Dinitrophenol	µg	ND U	ND U	ND U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND U	ND U	ND U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND U	ND U	ND U	NC	NC	NC
2-Choronaphthalene	µg	ND U	ND U	ND U	NC	NC	NC
2-Chlorophenol	µg	ND U	ND U	ND U	NC	NC	NC
2-Methylnaphthalene	µg	17	26	ND U	100.00%	100.00%	100.00%
2-Methylphenol (o-Cresol)	µg	ND U	ND U	ND U	NC	NC	NC
2-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC
2-Nitrophenol	µg	ND U	ND U	ND U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND U	ND U	ND U	NC	NC	NC
3-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND U	ND U	ND U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND U	ND U	ND U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND U	ND U	ND U	NC	NC	NC
4-Choroniline	µg	ND U	ND U	ND U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND U	ND U	ND U	NC	NC	NC
4-Methylphenol	µg	6.3	11	ND U	100.00%	100.00%	100.00%
4-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC
4-Nitrophenol	µg	ND U	ND U	ND U	NC	NC	NC
Acenaphthene	µg	ND U	ND U	ND U	NC	NC	NC
Acenaphthylene	µg	ND U	ND U	ND U	NC	NC	NC
Anthracene	µg	ND U	ND U	ND U	NC	NC	NC
Benz(a)anthracene	µg	ND U	ND U	ND U	NC	NC	NC
Benz(a)pyrene	µg	ND U	ND U	ND U	NC	NC	NC
Benz(b)fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC
Benz(g,h,i)perylene	µg	ND U	ND U	ND U	NC	NC	NC
Benz(k)fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND U	ND U	ND U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	ND U	ND U	ND U	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	ND U	0.44	J/J	1.1	J/J	NC
Butylbenzylphthalate	µg	ND U	ND U	ND U	NC	NC	NC
Chrysene	µg	ND U	ND U	ND U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND U	ND U	ND U	NC	NC	NC
Dibenzofuran	µg	ND U	ND U	ND U	NC	NC	NC
Diethylphthalate	µg	0.91	J/JB	1.4	J/JB	0.78	J/JB
Dimethylphthalate	µg	ND U	ND U	ND U	NC	NC	NC
di-n-Butylphthalate	µg	ND U	0.26	J/J	ND U	NC	NC
Di-n-Octylphthalate	µg	ND U	ND U	ND U	NC	NC	NC
Fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC
Fluorene	µg	ND U	ND U	ND U	NC	NC	NC
Hexachlorobenzene	µg	ND U	ND U	ND U	NC	NC	NC
Hexachlorobutadiene	µg	6	9.3	ND U	100.00%	100.00%	100.00%
Hexachlorocyclopentadiene	µg	ND U	ND U	ND U	NC	NC	NC
Hexachloroethane	µg	ND U	ND U	ND U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND U	ND U	ND U	NC	NC	NC
Isophorone	µg	33	44	ND U	100.00%	100.00%	100.00%
Naphthalene	µg	85	130	ND U	100.00%	100.00%	100.00%
Nitrobenzene	µg	ND U	ND U	ND U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND U	ND U	ND U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND U	ND U	ND U	NC	NC	NC
Pentachlorophenol	µg	ND U	ND U	ND U	NC	NC	NC
Phenanthrene	µg	ND U	ND U	ND U	NC	NC	NC
Phenol	µg	ND U	ND U	ND U	NC	NC	NC
Pyrene	µg	ND U	ND U	ND U	NC	NC	NC
Total	µg	249.91	396.70	1.88	99.25%	99.53%	99.39%

**Table 3.10**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – October 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier  
/\_ = Data validation qualifier  
ND = Non-detect  
NC = Not calculated  
µg = micrograms

Destruction efficiencies were not calculated if either influent samples or effluent sample was estimated.  
Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated  
U = below reported quantitation limit  
B = Compound was detected in an associated blank  
JB = Compound was detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

**Table 3.11**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – November 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 11/11/2004						
		Therm-Ox 1			Low	High	Average	
		On-Site IN1	On-Site IN2	Effluent EFF1				
1,2,4-Trichlorobenzene	µg	1.5	2.3	ND U	100.00%	100.00%	100.00%	
1,2-Dichlorobenzene	µg	52	65	ND U	100.00%	100.00%	100.00%	
1,3-Dichlorobenzene	µg	1.4	1.8	ND U	100.00%	100.00%	100.00%	
1,4-Dichlorobenzene	µg	6.6	8.1	ND U	100.00%	100.00%	100.00%	
2,4,5-Trichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC	
2,4,6-Trichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC	
2,4-Dichlorophenol	µg	ND U	ND U	ND U	NC	NC	NC	
2,4-Dimethylphenol	µg	ND U	ND U	ND U	NC	NC	NC	
2,4-Dinitrophenol	µg	ND U	ND U	ND U	NC	NC	NC	
2,4-Dinitrotoluene	µg	ND U	ND U	ND U	NC	NC	NC	
2,6-Dinitrotoluene	µg	ND U	ND U	ND U	NC	NC	NC	
2-Chloronaphthalene	µg	ND U	ND U	ND U	NC	NC	NC	
2-Chlorophenol	µg	ND U	ND U	ND U	NC	NC	NC	
2-Methylnaphthalene	µg	9.4	13	ND U	100.00%	100.00%	100.00%	
2-Methyphenol (o-Cresol)	µg	ND U	ND U	ND U	NC	NC	NC	
2-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC	
2-Nitrophenol	µg	ND U	ND U	ND U	NC	NC	NC	
3,3'-Dichlorobenzidine	µg	ND U	ND U	ND U	NC	NC	NC	
3-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC	
4,6-Dinitro-2-methylphenol	µg	ND U	ND U	ND U	NC	NC	NC	
4-Bromophenyl-phenyl Ether	µg	ND U	ND U	ND U	NC	NC	NC	
4-Chloro-3-methylphenol	µg	ND U	ND U	ND U	NC	NC	NC	
4-Chloroaniline	µg	ND U	ND U	ND U	NC	NC	NC	
4-Chlorophenyl-phenyl Ether	µg	ND U	ND U	ND U	NC	NC	NC	
4-Methylphenol	µg	ND U	ND U	ND U	NC	NC	NC	
4-Nitroaniline	µg	ND U	ND U	ND U	NC	NC	NC	
4-Nitrophenol	µg	ND U	ND U	ND U	NC	NC	NC	
Acenaphthene	µg	ND U	ND U	ND U	NC	NC	NC	
Acenaphthylene	µg	ND U	ND U	ND U	NC	NC	NC	
Anthracene	µg	ND U	ND U	ND U	NC	NC	NC	
Benz(a)anthracene	µg	ND U	ND U	ND U	NC	NC	NC	
Benz(a)pyrene	µg	ND U	ND U	ND U	NC	NC	NC	
Benz(b)fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC	
Benz(g,h,i)perylene	µg	ND U	ND U	ND U	NC	NC	NC	
Benz(k)fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC	
bis(2-Chloroethoxy) Methane	µg	ND U	ND U	ND U	NC	NC	NC	
bis(2-Chloroethyl) Ether	µg	ND U	ND U	ND U	NC	NC	NC	
bis(2-Ethylhexyl)phthalate	µg	ND U	4.0	J/J	0.7	J/J	NC	NC
Butylbenzylphthalate	µg	ND U	ND U	ND U	NC	NC	NC	
Chrysene	µg	ND U	ND U	ND U	NC	NC	NC	
Dibenz(a,h)anthracene	µg	ND U	ND U	ND U	NC	NC	NC	
Dibenzofuran	µg	ND U	ND U	ND U	NC	NC	NC	
Diethylphthalate	µg	ND U	ND U	ND U	NC	NC	NC	
Dimethylphthalate	µg	ND U	ND U	ND U	NC	NC	NC	
di-n-Butylphthalate	µg	ND U	0.48	J/B	0.3	J/B	NC	NC
Di-n-Octylphthalate	µg	ND U	ND U	ND U	NC	NC	NC	
Fluoranthene	µg	ND U	ND U	ND U	NC	NC	NC	
Fluorene	µg	ND U	ND U	ND U	NC	NC	NC	
Hexachlorobenzene	µg	ND U	ND U	ND U	NC	NC	NC	
Hexachlorobutadiene	µg	1.9	2.8	ND U	100.00%	100.00%	100.00%	
Hexachlorocyclopentadiene	µg	ND U	ND U	ND U	NC	NC	NC	
Hexachloroethane	µg	ND U	ND U	ND U	NC	NC	NC	
Indeno(1,2,3-c,d)pyrene	µg	ND U	ND U	ND U	NC	NC	NC	
Ispophorone	µg	22	31	ND U	100.00%	100.00%	100.00%	
Naphthalene	µg	53	78	ND U	100.00%	100.00%	100.00%	
Nitrobenzene	µg	ND U	ND U	ND U	NC	NC	NC	
N-Nitroso-di-n-propylamine	µg	ND U	ND U	ND U	NC	NC	NC	
N-Nitrosodiphenylamine	µg	ND U	ND U	ND U	NC	NC	NC	
Pentachlorophenol	µg	ND U	ND U	ND U	NC	NC	NC	
Phenanthrene	µg	ND U	ND U	ND U	NC	NC	NC	
Phenol	µg	ND U	ND U	ND U	NC	NC	NC	
Pyrene	µg	ND U	ND U	ND U	NC	NC	NC	
Total	µg	147.80	206.48	1.00	99.32%	99.52%	99.42%	

**Table 3.11**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – November 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Non-detect

NC = Not calculated

µg = micrograms

Destruction efficiencies were not calculated if either influent samples or effluent sample was estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated

U = below reported quantitation limit

B = Compound was detected in an associated blank

JB = Compound was detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

**Table 3.12**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – December 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Compounds	Units	Sampled 12/17/2004							
		On-Site IN1		On-Site IN2		Effluent EFF1		Low	
								High	
								Average	
1,2,4-Trichlorobenzene	µg	0.61	J/J	0.32	J/J	ND	U	NC NC NC	
1,2-Dichlorobenzene	µg	20		13		ND	U	100.00% 100.00% 100.00%	
1,3-Dichlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC	
1,4-Dichlorobenzene	µg	2.8		ND	U	ND	U	NC NC NC	
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
2,4-Dimethylphenol	µg	0.75	J/J	0.88	J/J	ND	U	NC NC NC	
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC NC NC	
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC NC NC	
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC NC NC	
2-Chlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
2-Methylnaphthalene	µg	3.3		1.2		ND	U	100.00% 100.00% 100.00%	
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U	ND	U	NC NC NC	
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC	
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U	NC NC NC	
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC	
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Methylphenol	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC NC NC	
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
Acenaphthene	µg	ND	U	ND	U	ND	U	NC NC NC	
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC NC NC	
Anthracene	µg	ND	U	ND	U	ND	U	NC NC NC	
Benz(a)anthracene	µg	ND	U	ND	U	ND	U	NC NC NC	
Benz(a)pyrene	µg	ND	U	ND	U	ND	U	NC NC NC	
Benz(b)fluoranthene	µg	ND	U	ND	U	ND	U	NC NC NC	
Benz(g,h,i)perylene	µg	ND	U	ND	U	ND	U	NC NC NC	
Benz(k)fluoranthene	µg	ND	U	ND	U	ND	U	NC NC NC	
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U	NC NC NC	
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U	ND	U	NC NC NC	
bis(2-Ethylhexyl)phthalate	µg	1.5	J/B	93		2.5	J/B	NC NC NC	
Butylbenzylphthalate	µg	ND	U	0.35	J/B	0.46	J/B	NC NC NC	
Chrysene	µg	ND	U	ND	U	ND	U	NC NC NC	
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U	NC NC NC	
Dibenzo-furan	µg	ND	U	ND	U	ND	U	NC NC NC	
Diethylphthalate	µg	ND	U	ND	U	0.29	J/B	NC NC NC	
Dimethylphthalate	µg	ND	U	ND	U	ND	U	NC NC NC	
di-n-Butylphthalate	µg	0.32	J/B	0.47	J/J	0.60	J/B	NC NC NC	
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U	NC NC NC	
Fluoranthene	µg	ND	U	ND	U	ND	U	NC NC NC	
Fluorene	µg	ND	U	ND	U	ND	U	NC NC NC	
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC NC NC	
Hexachlorobutadiene	µg	0.69	J/J	0.38	J/J	ND	U	NC NC NC	
Hexachlorocyclopentadiene	µg	ND	U	ND	U	ND	U	NC NC NC	
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC NC NC	
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U	NC NC NC	
Isophorone	µg	10		4.4		ND	U	100.00% 100.00% 100.00%	
Naphthalene	µg	18		8.8		0.19	J/J	NC NC NC	
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC NC NC	
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U	NC NC NC	
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC NC NC	
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC NC NC	
Phenanthrene	µg	ND	U	ND	U	ND	U	NC NC NC	
Phenol	µg	ND	U	ND	U	ND	U	NC NC NC	
Pyrene	µg	ND	U	ND	U	ND	U	NC NC NC	
Total	µg	57.97		122.80		4.04		93.03% 96.71% 94.87%	

**Table 3.12**  
**SBPA ISVE System and Thermal Oxidizer 1 Results**  
**for Method TO-13 (SVOCs) – December 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

**Notes:**

/ = Laboratory data qualifier

/\_ = Data validation qualifier

ND = Non-detect

NC = Not calculated

µg = micrograms

Destruction efficiencies were not calculated if either influent samples or effluent sample was estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

**Qualifiers:**

J = Result is estimated

U = below reported quantitation limit

B = Compound was detected in an associated blank

JB = Compound was detected in the compliance sample below the reporting limit and is an estimated concentration and the compound is also detected in the method blank resulting in a potential high bias.

**Table 3.13**  
**Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Fourth Quarter 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well ID	Date	Flow (cfm)	Vac ( $\text{in H}_2\text{O}$ )	VOCs (ppm)	Comments
SVE-01	11/24/2004	38	60	NM	VOCs not measured
	12/21/2004	0	63	181	
SVE-03	10/20/2004	0	33	485	
	11/24/2004	85	60	NM	VOCs not measured
	12/21/2004	0	61	264	
SVE-04	10/20/2004	86	52	560	
	11/24/2004	103	72	NM	VOCs not measured
	12/21/2004	109	74	390	
SVE-05	10/20/2004	0	31	490	
	11/24/2004	135	60	NM	VOCs not measured
	12/21/2004	171	59	285	>2 $\text{in H}_2\text{O}$
SVE-07	11/24/2004	0	39	NM	VOCs not measured
	12/21/2004	0	50	110	
SVE-08	11/24/2004	85	63	NM	VOCs not measured
	12/21/2004	0	68	160	
SVE-09	11/24/2004	136	54	NM	VOCs not measured
	12/21/2004	136	55	70	
SVE-11	10/20/2004	NM	31	790	Excess moisture
	11/24/2004	NM	52	NM	VOCs not measured
	12/21/2004	NM	55	81	
SVE-13	10/20/2004	0	28	1250	
	11/24/2004	27	54	NM	VOCs not measured
	12/21/2004	0	58	1050	
SVE-14	11/24/2004	97	58	NM	VOCs not measured
	12/21/2004	0	55	9999	PID max reading
SVE-15	11/24/2004	155	58	NM	VOCs not measured
	12/21/2004	171	59	535	>2 $\text{in H}_2\text{O}$
SVE-16	10/20/2004	0	30	1000	
	11/24/2004	0	50	NM	VOCs not measured
	12/21/2004	0	56	3765	
SVE-18	11/24/2004	0	60	NM	VOCs not measured
SVE-19	12/21/2004	0	60	340	Excessive moisture
SVE-20	10/20/2004	0	30	1000	
	11/24/2004	46	71	NM	VOCs not measured
	12/21/2004	0	65	317	Excessive moisture
SVE-21	11/24/2004	47	58	NM	VOCs not measured
	12/21/2004	60	60	215	Excessive moisture
SVE-23	10/20/2004	105	30	2700	
	11/24/2004	94	55	NM	VOCs not measured
	12/21/2004	112	52	4300	
SVE-25	10/20/2004	115	38	1675	
	11/24/2004	104	62	NM	VOCs not measured
	12/21/2004	129	63	2400	
SVE-26	10/20/2004	0	32	275	
	11/24/2004	0	59	NM	VOCs not measured
	12/21/2004	0	58	203	
SVE-27	11/24/2004	27	57	NM	VOCs not measured
	12/21/2004	12	58	1340	
SVE-29	10/20/2004	63	25	900	
	11/24/2004	60	59	NM	VOCs not measured
	12/21/2004	54	59	1492	
SVE-30	11/24/2004	0	61	NM	VOCs not measured
	12/21/2004	0	64	800	
SVE-31	11/24/2004	122	51	NM	VOCs not measured
	12/21/2004	0	57	573	
SVE-33	11/24/2004	166	62	NM	VOCs not measured
	12/21/2004	0	51	625	
SVE-36	11/24/2004	54	58	NM	VOCs not measured
	12/21/2004	27	60	1070	
SVE-37	11/24/2004	157	69	NM	VOCs not measured
	12/21/2004	27	62	703	
SVE-38	11/24/2004	0	62	NM	VOCs not measured
	12/21/2004	0	62	760	

**Table 3.13**  
**Off-Site In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Fourth Quarter 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well ID	Date	Flow (cfm)	Vac ( $\text{"H}_2\text{O}$ )	VOCs (ppm)	Comments
SVE-39	10/20/2004	112	32	1630	Excess moisture
	11/24/2004	140	60	NM	VOCs not measured
	12/21/2004	163	53	670	
SVE-41	10/20/2004	0	33	>10,000	PID above 10,000
	11/24/2004	0	62	NM	VOCs not measured
	12/21/2004	0	62	NM	VOCs not measured

**Notes:**

NM = not measured  
 cfm = cubic feet per minute  
 $\text{"H}_2\text{O}$  = inches of water  
 ppm = parts per million  
 VOCs = volatile organic compounds

No VOC readings were collected on 11/24/2004 due to a photoionization detector (PID) malfunction.

**Table 3.14**  
**Off-Site In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Fourth Quarter 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Date	KP1 Line Press (psia)	KP1 Flow (scfm)	KP1 Vac (" H <sub>2</sub> O)	KP2 Line Press (psia)	KP2 Flow (scfm)	KP2 Vac (" H <sub>2</sub> O)	OFCA1 Vac (" H <sub>2</sub> O)	OFCA2 Vac (" H <sub>2</sub> O)	OFCA3 Vac (" H <sub>2</sub> O)	Dilution Flow (cfm)	Blower Inf Line Press (psia)	Blower Inf Flow (scfm)
10/20/2004	13.6	-	33	13.7	475	30	32	23	30	0	13.4	1077
11/24/2004	12.4	-	60	12.4	695	58	50	50	60	0	12.2	1223
12/21/2004	12.4	-	62	13.3	0	38	60	52	60	0	12.2	1287

Date	Blower Inf Vac (" H <sub>2</sub> O)	Blower Inf VOC (ppm)	Blower Inf Temp. (°F)	Blower Eff Line Press (psia)	Blower Eff Flow (scfm)	Blower Eff Press (" H <sub>2</sub> O)	Blower Eff VOC (ppm)	Blower Eff Temp. (°F)	Filter Diff Press (" H <sub>2</sub> O)	Ambient Temperature (°F)	Barometric Pressure ("Hg)	Humidity (%)
10/20/2004	38	-	66	15.8	996	29.0	-	110	7.0	57	30.06	82%
11/24/2004	65	-	70	15.6	710	30.0	-	145	6.0	39	29.59	93%
12/21/2004	68	-	18	15.5	712	23.0	-	136	6.0	33	29.80	58%

Notes:

- " " = data not collected
- cfm = cubic feet per minute
- "H<sub>2</sub>O = inches of water
- ppm = parts per million
- VOCs = volatile organic compounds
- psia = pounds per square inch, atmosphere
- " Hg = inches of mercury
- " F = degrees Fahrenheit

**Table 3.15**  
**SBPA In-Situ Soil Vapor Extraction (ISVE) System Well Monitoring Data - Fourth Quarter 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well ID	Date	Flow (cfm)	Vac ( <sup>"</sup> H <sub>2</sub> O)	VOCs (ppm)	Comments
SVE-45	10/20/2004	0	72	2295	
	11/24/2004	0	60	NM	VOCs not measured
	12/21/2004	25	100	490	
SVE-47	10/20/2004	26	75	1400	
	11/24/2004	0	63	NM	VOCs not measured
	12/21/2004	25	100	32	Vac reading >100"
SVE-48	10/20/2004	29	76	3065	
	11/24/2004	0	63	NM	VOCs not measured
	12/21/2004	51	100	340	Vac reading >100"
SVE-55	10/20/2004	29	68	2080	
	11/24/2004	12	56	NM	VOCs not measured
	12/21/2004	23	100	405	
SVE-56	10/20/2004	118	75	4740	
	11/24/2004	77	58	NM	VOCs not measured
	12/21/2004	0	100	300	Liquid in riser pipe
SVE-59	10/20/2004	0	72	3070	
	11/24/2004	0	58	NM	VOCs not measured
	12/21/2004	0	100	460	Vac reading >100"
SVE-64	10/20/2004	17	75	3640	Excess liquid
	11/24/2004	0	63	NM	VOCs not measured
	12/21/2004	0	100	2800	Vac reading >100"
SVE-69	10/20/2004	57	70	5950	
	11/24/2004	0	52	NM	VOCs not measured
	12/21/2004	62	98	350	
SVE-70	10/20/2004	35	82	3800	
	11/24/2004	17	65	NM	VOCs not measured
	12/21/2004	11	100	441	Vac reading >100"
SVE-72	10/20/2004	23	84	5400	
	11/24/2004	12	67	NM	VOCs not measured
	12/21/2004	28	100	3305	Vac reading >100"
SVE-75	11/24/2004	120	61	NM	VOCs not measured
	12/21/2004	0	100	500	Vac reading >100"
SVE-76	10/20/2004	184	70	4620	
	11/24/2004	179	60	NM	VOCs not measured
	12/21/2004	0	98	802	
SVE-83	10/20/2004	0	90	>10,000	VOCs > 10,000 ppm
	11/24/2004	264	67	NM	VOCs not measured
	12/21/2004	143		NM	Excessive liquid
SVE-87	10/20/2004	45	82	NM	
	11/24/2004	58	71	NM	VOCs not measured
	12/21/2004	360		NM	Excessive moisture

**Notes:**

NM = not measured

cfm = cubic feet per minute

" H<sub>2</sub>O = inches of water

ppm = parts per million

VOCs = volatile organic compounds

Vac = Vacuum

No VOC readings were collected on 11/24/2004 due to a photoionization detector (PID) malfunction.

**Table 3.16**  
**SBPA In-Situ Soil Vapor Extraction (ISVE) System Header Monitoring Data - Fourth Quarter 2004**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Date	Line Press (psia)	Flow (scfm)	Vac (" H <sub>2</sub> O)	Line Press (psia)	Flow (scfm)	Vac (" H <sub>2</sub> O)	Dilution Flow (cfm)	Blower Inf Line Press (psia)	Blower Inf Flow (scfm)	Blower Inf Vac (" H <sub>2</sub> O)	Blower Inf VOC (ppm)
10/20/2004	11.7	868	85	11.6	155	87	0	14.8	-	0	-
11/24/2004	12.0	389	71	12.0	0	70	0	12.6	907	54	-
12/21/2004	11.0	0	100	11.0	152	100	0	14.6	0	0	-

Date	Blower Inf Temp. (°F)	Blower Eff Diff Press (" H <sub>2</sub> O)	Blower Eff Line Press (psia)	Blower Eff Flow (scfm)	Blower Eff Press (" H <sub>2</sub> O)	Blower Eff VOC (ppm)	Blower Eff Temp. (°F)	Filter Diff Press (" H <sub>2</sub> O)	Ambient Temperature (°F)	Barometric Pressure ("Hg)	Humidity (%)
10/20/2004	62	5.2	14.9	1179	4.0	-	145	17.0	57	30.06	82%
11/24/2004	54	6.0	14.7	1277	4.5	-	126	17.0	39	29.59	93%
12/21/2004	54	3.2	14.6	906	0.0	-	158	12.0	36	29.80	58%

**Notes:**

- " " = data not collected
- cfm = cubic feet per minute
- "H<sub>2</sub>O = inches of water
- ppm = parts per million
- VOCs = volatile organic compounds
- psia = pounds per square inch, atmosphere
- "Hg = inches of mercury
- °F = degrees Fahrenheit

**Table 6.1**  
**Water Table Elevations Across the Barrier Wall and Near the PGCS**  
**Fourth Quarter 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

**Upper Aquifer Wells**

Well Designation	Reference Points			12/21/2004		Notes	Difference Across Barrier Wall
	East	North	TOIC	Level	Elevation		
MW11	6377	7329	640.47	6.01	634.46		n/a
MW13	5050	7814	634.08	3.28	630.80		n/a
MW37	5395	7976	636.78	4.74	632.04		n/a
MW46	4526	7424	633.32	2.82	630.50		n/a
MW48	5669	7814	636.36	4.29	632.07		n/a
MW49	5551	7650	637.00	4.90	632.10		n/a

**Staff Gauges & Piezometers**

Well Designation	Reference Points			12/21/2004		Notes	Difference Across Barrier Wall
	East	North	TOSG	Level	Elevation		
P23	4689	7018	636.18	5.69	630.49		n/a
P25	5131	7510	635.01	1.97	633.04	Resurveyed	n/a
P26	4764	7309	634.23	3.76	630.47		n/a
P27	4904	7020	639.70	8.51	631.19		n/a
P28	5883	7486	644.53	10.60	633.93		n/a
P31	5480	7159	641.03		641.03		n/a
P32	5746	7026	642.32	11.02	631.30		n/a
P36	5410	6851	645.89		645.89		n/a
P40	5931	7241	638.77	4.36	634.41		n/a
P41	5663	7377	637.23	3.41	633.82		n/a
P49	5145	6949	638.98	8.80	630.18		n/a
SG8R	5409	5252	634.70		DRY		
SG5	5464	7713	633.36		DRY		
SG13	4819	7209	631.53	4.9	630.4	Ice; TOSG = 6.0' mark	n/a

**PGCS Piezometer Sets**

Well Designation	Reference Points			12/21/2004		Notes	Difference Across Barrier Wall
	East	North	TOC	Level	Elevation		
P81	5577	7581	636.19	4.35	631.84	Only 0.02 ft of water	n/a
P82	5577	7572	635.77	4.27	631.50		n/a
P83	5577	7561.6	635.95	3.91	632.04		n/a
P84	5322	7603	634.35	3.45	630.90		n/a
P85	5326	7594	634.08	3.05	631.03		n/a
P86	5329	7585	634.41	3.25	631.16		n/a
P87	5121	7466	633.88	3.85	630.03		n/a
P88	5130	7460	633.90	3.15	630.75		n/a
P89	5137	7454	634.02	3.60	630.42		n/a
P90	4881	7152	634.45	4.02	630.43		n/a
P91	4889	7145	634.59	4.13	630.46		n/a
P92	4896	7138.1	633.87	3.38	630.49		n/a

**Table 6.1**  
**Water Table Elevations Across the Barrier Wall and Near the PGCS**  
**Fourth Quarter 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

**BWES Water Level and Piezometer Pairs**

Well Designation	Reference Points			12/21/2004		Notes	Difference Across Barrier Wall <sup>1</sup>
	East	North	TOC	Level	Elevation		
P93 - Outside BW	TBD	TBD	639.05	8.10	630.95	Installed Nov. 2004	-1.47
P94 - Inside BW	TBD	TBD	640.99	11.51	629.48	Installed Nov. 2004	
P95 - Outside BW	5146	6532	638.58	5.95	632.63		-9.17
P96 - Inside BW	5156	6537	641.26	DRY	DRY	TD=17.80 (623.46)	
P105 - Outside BW	5885	6678	638.86	3.99	634.87		-5.32
P106 - Inside BW	5871	6685	638.10	8.55	629.55		
P107 - Outside BW	5766	7339	637.42	3.67	633.75		-2.59
P108 - Inside BW	5757	7324	638.13	6.97	631.16		
P109 - Outside BW	5740	6387	644.30	9.64	634.66		-7.01
P110 - Inside BW	5705	6382	647.68	20.03	627.65		
P111 - Outside BW	5551	5950	650.03	16.08	633.95		-9.73
P112 - Inside BW	5525	5960	653.36	29.14	624.22		
P113 - Inside BW	5309	5693	657.53	31.47	626.06		-7.35
ORCPZ102 - Outside BW	5331	5612	652.47	19.06	633.41		
P114 - Inside BW	5035	5729	653.69	27.34	626.35		-7.06
P115 - Outside BW	4970	5708	652.50	19.09	633.41		
P116 - Inside BW	5031	6087	646.26	20.24	626.02		-7.70
P117 - Outside BW	5014	6087	643.93	10.21	633.72		
P118 - Inside BW	5402	6539	645.52	18.72	626.80		n/a

**Notes:**

All depth measurements and elevations are in units of feet.

Elevation is in feet above mean sea level.

TBD = to be determined

TD = total depth

TOIC = top of inner casing

TOC = top of casing

TOSG = top of staff gauge

CNM = could not measure (reason given under "Notes" column)

n/a = not applicable

<sup>1</sup> = A positive value indicates that the water level is higher inside the barrier wall.  
A negative value indicates that the water level is lower inside the barrier wall.

**Table 6.2**  
**Water Levels Inside Barrier Wall - Fourth Quarter 2004**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

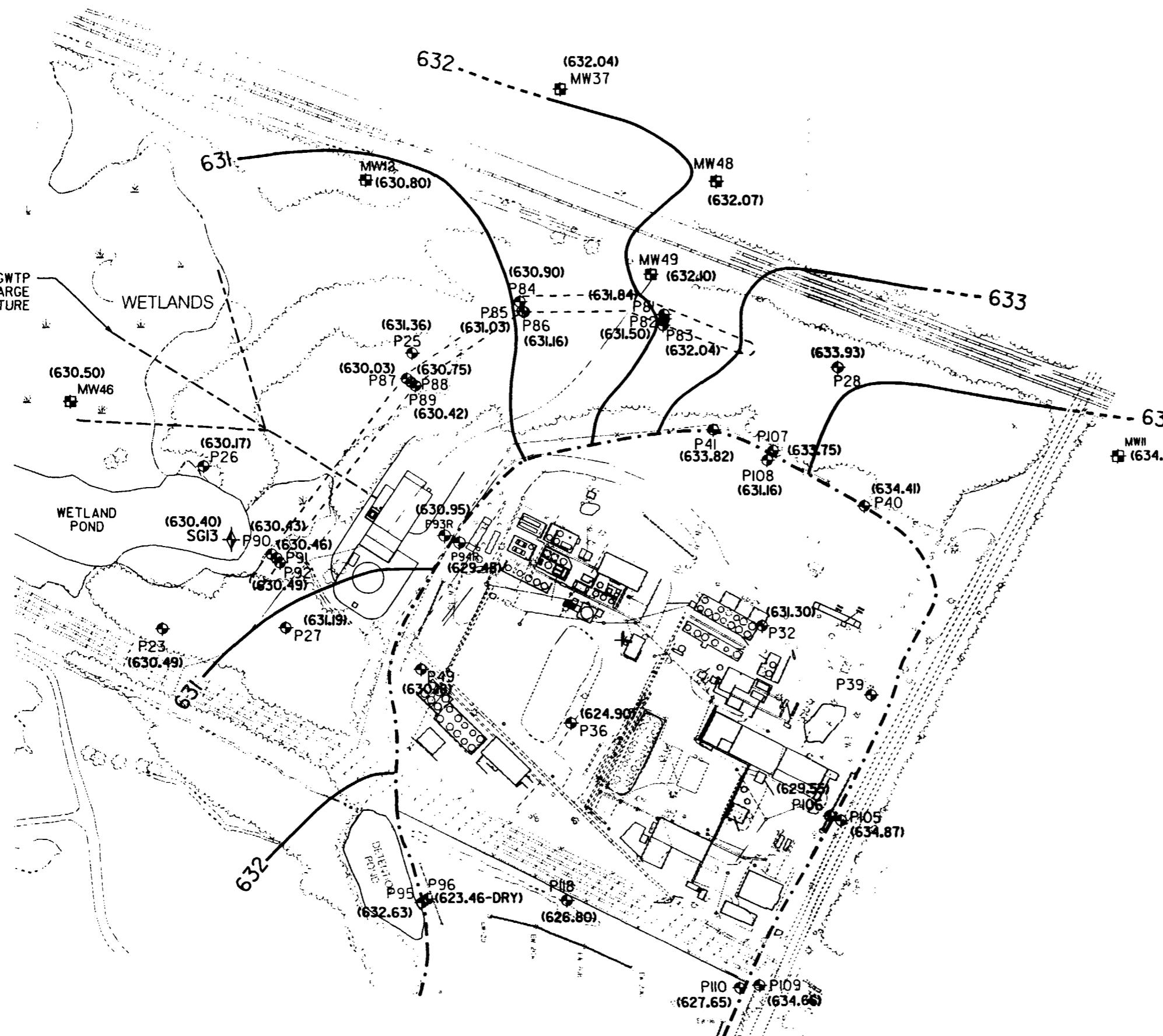
Date	On-Site Area					
	Target Level	P-29	P-31	P-32	P-36	P-49
10/1/2004	629.0	630.4	630.9	629.7	624.9	628.9
11/5/2004	629.0	630.4	630.9	629.8	624.9	629.2
11/18/2004	629.0	630.4	630.9	629.8	624.9	629.2
12/3/2004	629.0	630.4	630.9	630.6	624.9	630.3
12/10/2004	629.0	630.4	630.9	631.1	624.9	630.9

Date	Off-Site Area										
	Target Level	P-96	P-110	P-112	P-113	P-114	P-116	P-118	AS-7	AS-8	AS-9
10/1/2004	626.0	625.3	627.9	627.3	627.0	627.2	627.2	627.6	NM	NM	NM
11/5/2004	626.0	622.0	627.7	626.3	627.3	627.4	627.1	627.5	628.1	627.9	627.8
11/18/2004	626.0	620.7	627.5	625.1	626.4	626.6	626.2	627.0	NM	NM	NM
12/3/2004	626.0	621.0	627.3	625.5	625.6	625.9	625.7	626.6	630.1	628.6	628.1
12/10/2004	626.0	621.2	627.9	626.0	626.6	627.2	627.0	627.1	627.9	626.1	627.5

**Notes:**

All water level elevations are in feet AMSL.

NM = not measured



0 200  
SCALE IN FEET

#### LEGEND

- P106 PIEZOMETER LOCATION AND DESIGNATION
- SG13 STAFF GAUGE LOCATION AND DESIGNATION
- MW13 MONITORING WELL LOCATION AND DESIGNATION
- 630.40 GROUNDWATER ELEVATION
- - - - - BARRIER WALL
- - - - - PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH
- EW-II BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
- 631 GROUNDWATER ELEVATION CONTOUR BASED ON GROUNDWATER ELEVATION DATA
- - - 631 CONTOUR LINE DASHED WHERE ELEVATION IS INFERRED

#### NOTE

GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON DECEMBER 21, 2004

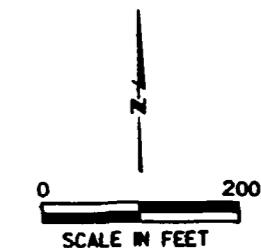
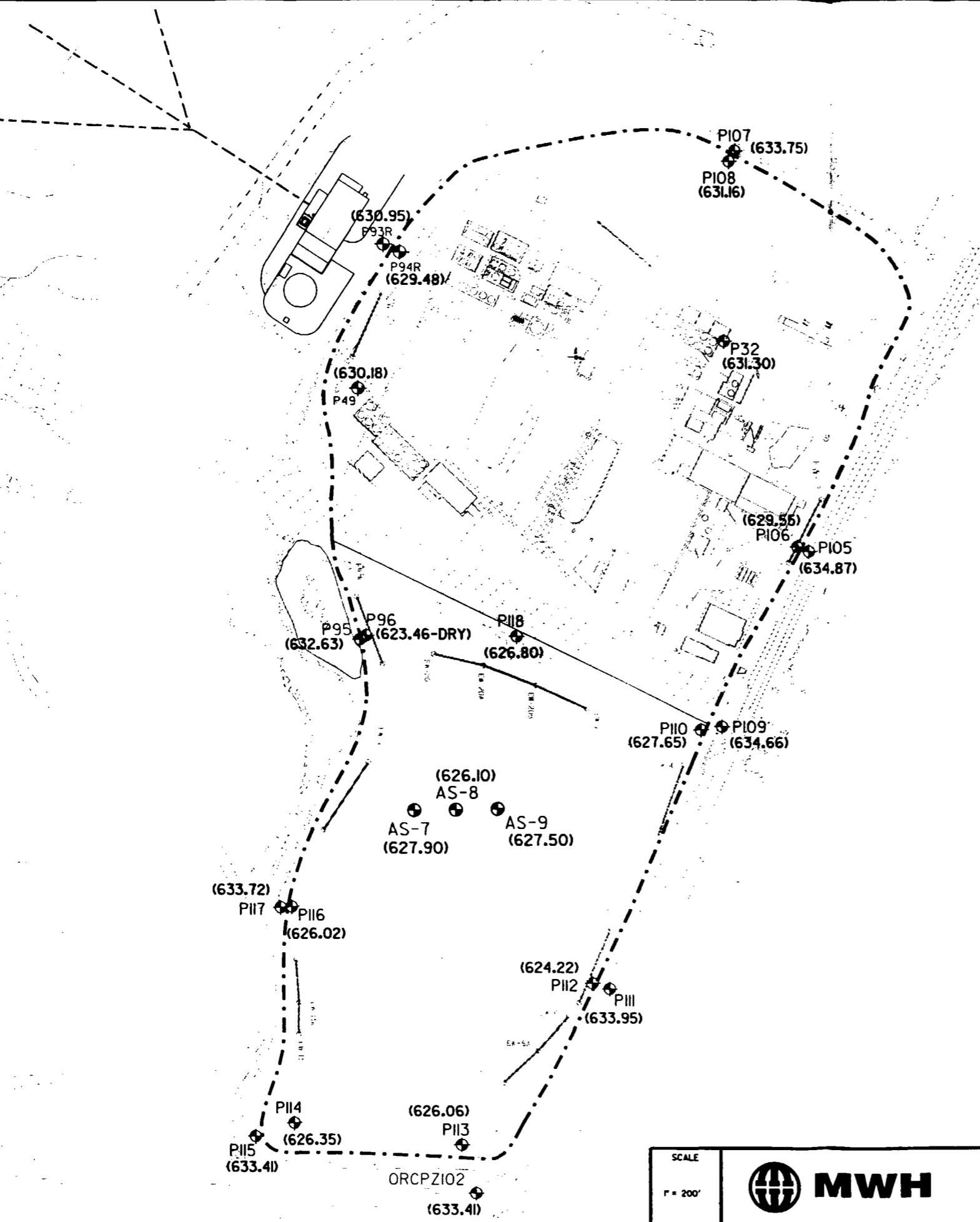
SCALE  
R = 200'



AMERICAN CHEMICAL SERVICE, INC.  
GRIFFITH, INDIANA

WATER TABLE ELEVATIONS  
NEAR THE PGCS  
DECEMBER 2004

FIGURE  
6.1



LEGEND

- PI06 PIEZOMETER LOCATION AND DESIGNATION
- CPZ7 ORC PIEZOMETER LOCATION AND DESIGNATION
- (631.30) GROUNDWATER ELEVATION
- - - - - BARRIER WALL
- BWES EXTRACTION TRENCH LOCATION AND DESIGNATION
- PERIMETER GROUND WATER CONTAINMENT SYSTEM EXTRACTION TRENCH

NOTE

I. GROUNDWATER ELEVATIONS WERE MEASURED AT THE SITE ON DECEMBER 21, 2004

SCALE  
1' = 200'

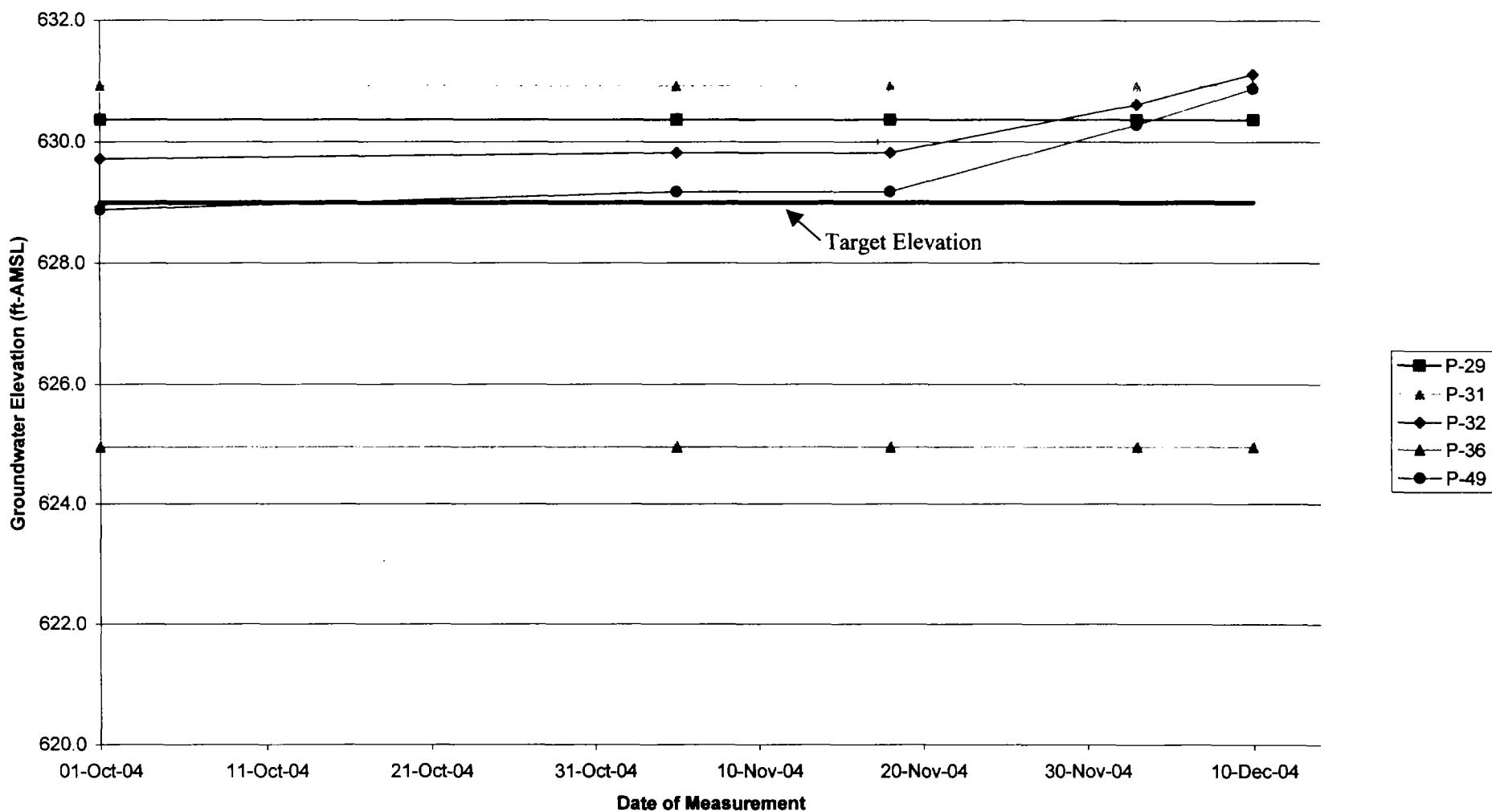


AMERICAN CHEMICAL SERVICE, INC.  
GRIFFITH, INDIANA

WATER TABLE ELEVATIONS  
ACROSS THE BARRIER WALL  
DECEMBER 2004

FIGURE  
6.2

**Figure 6.3**  
**Water Level Trends Inside the Barrier Wall (Still Bottoms Pond Area)**  
**ACS NPL Site**  
**Griffith, Indiana**

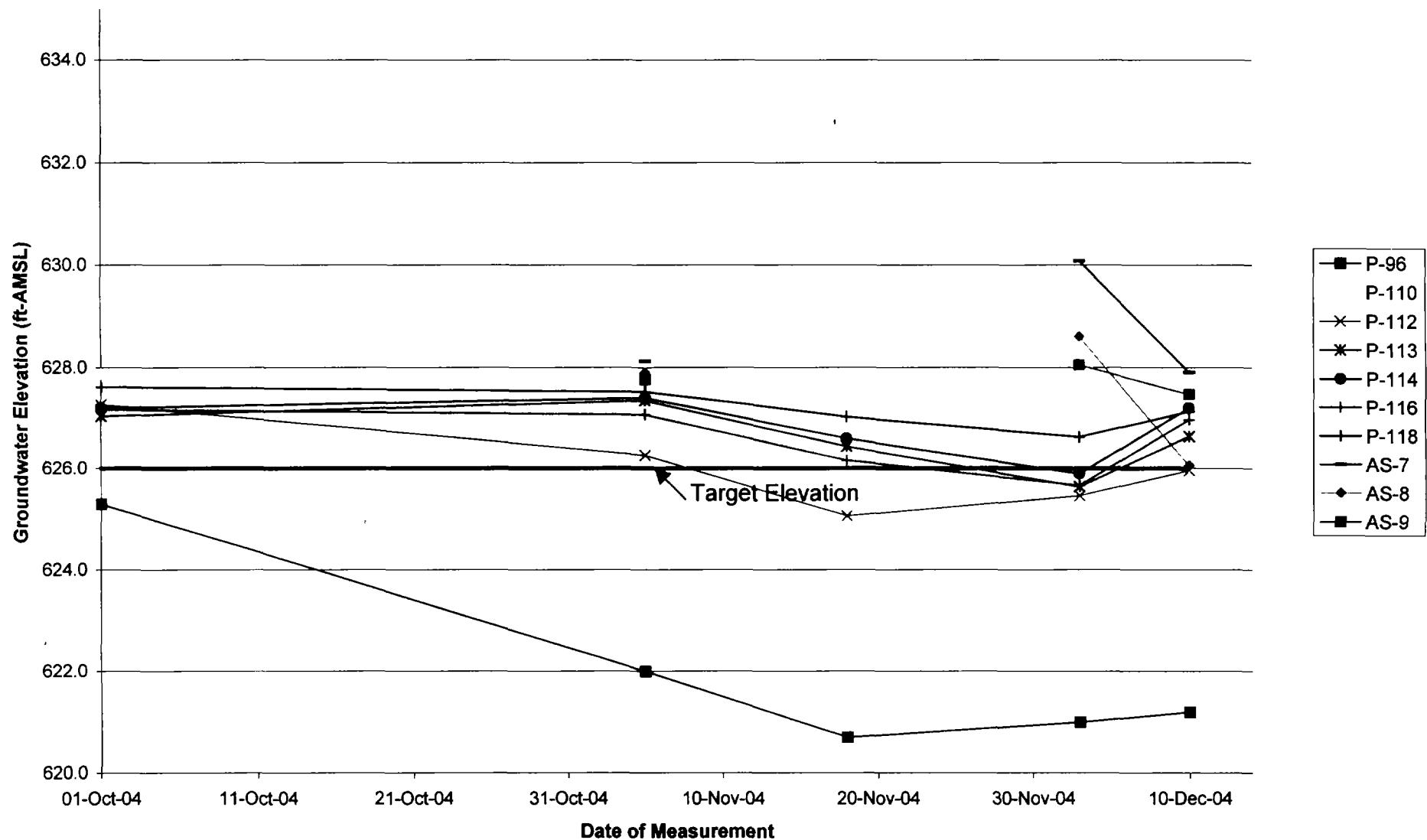


**Note:**

Hollow Points represent dry piezometers (data used for graphing purposes only).

The bottom elevation of the piezometers may vary due to silting or removal of silt.

**Figure 6.4**  
**Water Level Trends Inside the Barrier Wall (Off-Site Area)**  
**ACS NPL Site**  
**Griffith, Indiana**



**APPENDIX A**

**EFFLUENT ANALYTICAL DATA**

**October 19, 2004 Compliance Sample  
Laboratory Results**

**FORM 1**  
**VOLATILE ORGANICS ANALYSIS DATA SHEET**

**CLIENT SAMPLE NO.**

Lab Name: COMPUCHEM

Method: 8260B

**EFFLUENT**

Lab Code: LIBRTY Case No.:

SAS No.:

SDG No.: 4737

Matrix: (soil/water) WATER

Lab Sample ID: 473701

Sample wt/vol: 25 (g/ml) ML

Lab File ID: 473701A61

Level: (low/med) LOW

Date Received: 10/20/04

Moisture: not dec.

Date Analyzed: 11/01/04

GC Column: RTX-VMS ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	0.50	U WJ
75-01-4-----	Vinyl Chloride	0.50	U
74-83-9-----	Bromomethane	0.50	U WJ
75-00-3-----	Chloroethane	0.50	U
75-35-4-----	1,1-Dichloroethene	0.50	U
75-15-0-----	Carbon disulfide	0.50	U
67-64-1-----	Acetone	2.5	U WJ
75-09-2-----	Methylene Chloride	0.14	J J
156-60-5-----	trans-1,2-Dichloroethene	0.50	U
75-34-3-----	1,1-Dichloroethane	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.24	J J
78-93-3-----	2-butanone	2.5	U
67-66-3-----	Chloroform	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U
56-23-5-----	Carbon Tetrachloride	0.50	U
71-43-2-----	Benzene	0.50	U
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.50	U
78-87-5-----	1,2-Dichloropropane	0.50	U
75-27-4-----	Bromodichloromethane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-10-1-----	4-Methyl-2-pentanone	2.5	U
108-88-3-----	Toluene	0.33	J
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	0.50	U
591-78-6-----	2-hexanone	2.5	U
124-48-1-----	Dibromochloromethane	0.50	U
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
108-38-3-----	m,p-Xylene	1.0	U
95-47-6-----	o-Xylene	0.50	U
100-42-5-----	Styrene	0.50	U

FORM 1 VOA

**FORM 1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**

**CLIENT SAMPLE NO.**

**EFFLUENT**

Lab Name:	COMPUCHEM	Method:	8270C
Lab Code:	LIBRTY	Case No.:	SAS No.: SDG No.: 4737
Matrix:	(soil/water) WATER	Lab Sample ID: 473701	
Sample wt/vol:	1000 (g/mL) ML	Lab File ID: 473701B64	
Level:	(low/med) LOW	Date Received: 10/20/04	
% Moisture:	_____ decanted: (Y/N) _____	Date Extracted: 10/21/04	
Concentrated Extract Volume:	1000 (uL)	Date Analyzed: 11/03/04	
Injection Volume:	1.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup:	(Y/N) N	pH:	_____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q	
111-44-4-----	Bis(2-chloroethyl)ether _____	9.6	U
106-44-5-----	4-Methylphenol _____	10	U
78-59-1-----	Isophorone _____	10	U
117-81-7-----	bis(2-ethylhexyl)Phthalate _____	6.0	U

FORM I SV

8270C

*F. T. Tolosa*

1D  
GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM	Contract: 8082
Lab Code: COMPU	Case No.: SAS No.: SDG No.: 4737
Matrix: (soil/water) WATER	Lab Sample ID: 473701
Sample wt/vol: 1000 (g/mL) ML	Lab File ID: _____
% Moisture: _____ decanted: (Y/N) _____	Date Received: 10/20/04
Extraction: (SepF/Cont/Sonc) SEPF	Date Extracted: 10/21/04
Concentrated Extract Volume: 2500 (uL)	Date Analyzed: 10/21/04
Injection Volume: 1.0 (uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____	Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2-----	Aroclor-1016		0.47	U
11104-28-2-----	Aroclor-1221		0.63	U
11141-16-5-----	Aroclor-1232		0.47	U
53469-21-9-----	Aroclor-1242		0.31	U
12672-29-6-----	Aroclor-1248		0.31	U
11097-69-1-----	Aroclor-1254		0.31	U
11096-82-5-----	Aroclor-1260		0.47	U

FORM I PEST

USBPA - CLP

**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

**EFFLUENT**

Lab Name: COMPUCHEM Contract: ACS 7010311

**Contract: ACS 7010311**

Lab Code: CompuChe Case No.: ACS 701 NRAS No.: SDG No.: ACS 70103

Matrix: (soil/water) WATER Lab Sample ID: 473701

**Level:** (low/med) LOW      **Date Received:** 10/20/2004

**• Solids:** 0.0

Concentration Units (ug/L or mg/kg dry weight): PH UNITS

J

**Color Before:** **Clarity Before:** **Texture:**

**Clarity Before:** \_\_\_\_\_ **Texture:** \_\_\_\_\_

**Texture:**

**Color After:** \_\_\_\_\_ **Clarity After:** \_\_\_\_\_ **Artifacts:** \_\_\_\_\_

**Clarity After:** \_\_\_\_\_ **Artifacts:** \_\_\_\_\_

**Artifacts:** \_\_\_\_\_

**Comments:**

\_\_\_\_\_

**FORM LA-IN**

ILM05.2

2

**November 30, 2004 Compliance Sample  
Laboratory Results**

**FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET**

CLIENT SAMPLE NO.

- Lab Name: COMPUCHEM	Method: 8260B	EFFLUENT
Lab Code: LIBRTY	Case No.:	SAS No.: SDG No.: 5157
Matrix: (soil/water) WATER		Lab Sample ID: 515701
Sample wt/vol: 25 (g/ml) ML		Lab File ID: 515701B62
Level: (low/med) LOW		Date Received: 12/02/04
% Moisture: not dec.		Date Analyzed: 12/08/04
GC Column: RTX-VMS ID: 0.18 (mm)		Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)		Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	0.50	U
75-01-4-----	Vinyl Chloride	0.50	U
74-83-9-----	Bromomethane	0.50	U
75-00-3-----	Chloroethane	0.71	
75-35-4-----	1,1-Dichloroethene	0.50	U
75-15-0-----	Carbon disulfide	0.50	U
67-64-1-----	Acetone	1.9	J 2.5 uBT
75-09-2-----	Methylene Chloride	0.80	
156-60-5-----	trans-1,2-Dichloroethene	0.50	U
75-34-3-----	1,1-Dichloroethane	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.55	
78-93-3-----	2-butanone	2.5	U
67-66-3-----	Chloroform	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U
56-23-5-----	Carbon Tetrachloride	0.50	U
71-43-2-----	Benzene	0.13	J
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.12	J
78-87-5-----	1,2-Dichloropropane	0.50	U
75-27-4-----	Bromodichloromethane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-10-1-----	4-Methyl-2-pentanone	2.5	U
108-88-3-----	Toluene	0.45	J
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	0.50	
591-78-6-----	2-hexanone	2.5	U
124-48-1-----	Dibromochloromethane	0.50	U
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
108-38-3-----	m,p-Xylene	0.38	J
95-47-6-----	o-Xylene	0.12	J
100-42-5-----	Styrene	0.50	U

FORM 1 VOA

11/11/04

USEPA - CLP

**1A-IN**  
**INORGANIC ANALYSIS DATA SHEET**

EPA SAMPLE NO.

## **EFFLUENT**

Lab Name: COMPUCHEM Contract: ACS 7010311  
Lab Code: CompuChe Case No.: ACS 701 NRAS No.: \_\_\_\_\_ SDG No.: ACS 70103  
Matrix: (soil/water) WATER Lab Sample ID: 515701  
Level: (low/med) LOW Date Received: 12/02/2004  
t Solids: 0.0

Concentration Units ( ug/L or mg/kg dry weight): PH UNITS

**Color Before:** **Clarity Before:** **Texture:**

**Color After:** **Clarity After:** **Artifacts:**

**Comments:**

—  
—  
—

Winfred

**December 15, 2004 Compliance Sample  
Laboratory Results**

**FORM 1**  
**VOLATILE ORGANICS ANALYSIS DATA SHEET**

CLIENT SAMPLE NO.

Lab Name: COMPUCHEM	Method: 8260B	EFFLUENT
Lab Code: LIBRTY	Case No.:	SAS No.: SDG No.: 5297
Matrix: (soil/water) WATER	Lab Sample ID: 529701	
Sample wt/vol: 25 (g/ml) ML	Lab File ID: 529701B62	
Level: (low/med) LOW	Date Received: 12/16/04	
* Moisture: not dec.	Date Analyzed: 12/18/04	
GC Column: RTX-VMS ID: 0.18 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	0.50	U
75-01-4-----	Vinyl Chloride	0.50	U
74-83-9-----	Bromomethane	0.50	U <i>uJ</i>
75-00-3-----	Chloroethane	0.92	
75-35-4-----	1,1-Dichloroethene	0.50	U
75-15-0-----	Carbon disulfide	0.50	U
67-64-1-----	Acetone	1.5	JB 25 <i>uB</i>
75-09-2-----	Methylene Chloride	0.98	
156-60-5-----	trans-1,2-Dichloroethene	0.50	U
75-34-3-----	1,1-Dichloroethane	0.50	U
156-59-2-----	cis-1,2-Dichloroethene	0.50	U
78-93-3-----	2-butanone	4.1	
67-66-3-----	Chloroform	0.50	U
71-55-6-----	1,1,1-Trichloroethane	0.50	U <i>uJ</i>
56-23-5-----	Carbon Tetrachloride	0.50	U <i>uJ</i>
71-43-2-----	Benzene	0.50	U
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	0.50	U
78-87-5-----	1,2-Dichloropropane	0.50	U
75-27-4-----	Bromodichloromethane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-10-1-----	4-Methyl-2-pentanone	2.5	U
108-88-3-----	Toluene	0.19	J
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	0.50	U
591-78-6-----	2-hexanone	2.5	U
124-48-1-----	Dibromochloromethane	0.50	U
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
108-38-3-----	m,p-Xylene	1.0	U
95-47-6-----	o-Xylene	0.50	U
100-42-5-----	Styrene	0.50	U

FORM I VOA

## USEPA - CLP

1A-IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEMContract: ACS 7010311Lab Code: CompuChe Case No.: ACS 701 NRAS No.: \_\_\_\_\_ SDG No.: ACS 70103Matrix: (soil/water) WATERLab Sample ID: 529701Level: (low/med) LOWDate Received: 12/16/2004% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): pH UNITS

CAS No.	Analyte	Concentration	C	Q	M
150.1	pH	7.32	J		

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

---

---

---

**APPENDIX B**

**THERMAL OXIDIZER OFF-GAS ANALYTICAL DATA**

**October 14, 2004 Off-Gas Sample Laboratory Results**

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF OCT14

ID#: 0410316B-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.70	Not Detected	1.8	Not Detected
Bromomethane	0.70	Not Detected	2.7	Not Detected
Chloroethane	0.70	Not Detected	1.8	Not Detected
1,1-Dichloroethene	0.70	2.6	2.8	10
Methylene Chloride	0.70	0.42 J /53	2.4	1.5 J
1,1-Dichloroethane	0.70	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.70	5.6	2.8	22
Chloroform	0.70	0.52 J /5	3.4	2.5 J
1,1,1-Trichloroethane	0.70	64	3.8	350
Carbon Tetrachloride	0.70	Not Detected	4.4	Not Detected
Benzene	0.70	1.1	2.2	3.4
1,2-Dichloroethane	0.70	Not Detected	2.8	Not Detected
Trichloroethene	0.70	0.58 J /5	3.7	3.1 J
1,2-Dichloropropane	0.70	Not Detected	3.2	Not Detected
cis-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
Toluene	0.70	2.9	2.6	11
trans-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
1,1,2-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Tetrachloroethene	0.70	1.8	4.7	12
Chlorobenzene	0.70	Not Detected	3.2	Not Detected
Ethyl Benzene	0.70	1.3	3.0	5.8
m,p-Xylene	0.70	5.8	3.0	25
o-Xylene	0.70	2.1	3.0	9.1
Styrene	0.70	0.12 J /5	3.0	0.50 J
1,1,2,2-Tetrachloroethane	0.70	Not Detected	4.8	Not Detected
Bromodichloromethane	0.70	0.34 J /5	4.6	2.3 J
Dibromochloromethane	0.70	Not Detected	5.9	Not Detected
Chloromethane	2.8	Not Detected	5.7	Not Detected
Acetone	2.8	22	6.6	53
Carbon Disulfide	2.8	0.93 J /5	8.6	2.9 J
trans-1,2-Dichloroethene	2.8	Not Detected	11	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	4.4	8.2	13
4-Methyl-2-pentanone	2.8	0.58 J /5	11	2.4 J
2-Hexanone	2.8	0.84 J /5	11	3.4 J
Bromoform	2.8	Not Detected	29	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130

075  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF OCT14

ID#: 0410316B-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	100	70-130

OPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 0FS1 IN1 OCT14

ID#: 0410316A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1400	Not Detected <i>VS</i>	3500	Not Detected
Bromomethane	1400	Not Detected <i>VS</i>	5300	Not Detected
Chloroethane	1400	Not Detected <i>VS</i>	3600	Not Detected
1,1-Dichloroethene	1400	2300 <i>J</i>	5400	9100
Methylene Chloride	1400	94000 <i>J</i>	4700	330000
1,1-Dichloroethane	1400	10000 <i>J</i>	5500	42000
cis-1,2-Dichloroethene	1400	6000 <i>J</i>	5400	24000
Chloroform	1400	3600 <i>J</i>	6600	18000
1,1,1-Trichloroethane	1400	63000 <i>J</i>	7400	350000
Carbon Tetrachloride	1400	Not Detected <i>VS</i>	8600	Not Detected
Benzene	1400	42000 <i>J</i>	4300	130000
1,2-Dichloroethane	1400	2400 <i>S</i>	5500	9900
Trichloroethene	1400	42000 <i>S</i>	7300	220000
1,2-Dichloropropane	1400	820 <i>J S</i>	6300	3800 <i>J</i>
cis-1,3-Dichloropropene	1400	Not Detected <i>VS</i>	6200	Not Detected
Toluene	1400	300000 <i>S</i>	5100	1100000
trans-1,3-Dichloropropene	1400	Not Detected <i>VS</i>	6200	Not Detected
1,1,2-Trichloroethane	1400	460 <i>J S</i>	7400	2500 <i>J</i>
Tetrachloroethene	1400	52000 <i>S</i>	9200	350000
Chlorobenzene	1400	Not Detected <i>VS</i>	6300	Not Detected
Ethyl Benzene	1400	33000 <i>J</i>	5900	140000
m,p-Xylene	1400	140000 <i>J</i>	5900	590000
o-Xylene	1400	47000 <i>J</i>	5900	200000
Styrene	1400	2400 <i>J</i>	5800	10000
1,1,2,2-Tetrachloroethane	1400	Not Detected <i>VS</i>	9300	Not Detected
Bromodichloromethane	1400	Not Detected <i>VS</i>	9100	Not Detected
Dibromochloromethane	1400	Not Detected <i>VS</i>	12000	Not Detected
Chloromethane	5400	Not Detected <i>VS</i>	11000	Not Detected
Acetone	5400	48000 <i>S</i>	13000	110000
Carbon Disulfide	5400	Not Detected <i>VS</i>	17000	Not Detected
trans-1,2-Dichloroethene	5400	Not Detected <i>VS</i>	22000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5400	22000 <i>J</i>	16000	64000
4-Methyl-2-pentanone	5400	15000 <i>S</i>	22000	62000
2-Hexanone	5400	820 <i>J S</i>	22000	3400 <i>J</i>
Bromoform	5400	Not Detected <i>VS</i>	56000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	103	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 OCT14

ID#: 0410316A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates  
4-Bromofluorobenzene

%Recovery  
95

Method  
Limits  
70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 OCT14 Duplicate

ID#: 0410316A-01B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	680	740 J	1700	1900
Bromomethane	680	Not Detected VJ	2600	Not Detected
Chloroethane	680	Not Detected VJ	1800	Not Detected
1,1-Dichloroethene	680	1600 J	2700	6600
Methylene Chloride	680	99000 J	2400	340000
1,1-Dichloroethane	680	11000 J	2800	43000
cis-1,2-Dichloroethene	680	6400 J	2700	25000
Chloroform	680	3800 J	3300	18000
1,1,1-Trichloroethane	680	66000 J	3700	360000
Carbon Tetrachloride	680	Not Detected VJ	4300	Not Detected
Benzene	680	44000 J	2200	140000
1,2-Dichloroethane	680	2600 J	2800	10000
Trichloroethene	680	43000 J	3600	230000
1,2-Dichloropropane	680	800 J	3100	3700
cis-1,3-Dichloropropene	680	Not Detected VJ	3100	Not Detected
Toluene	680	310000 E J	2600	1200000 E
trans-1,3-Dichloropropene	680	Not Detected VJ	3100	Not Detected
1,1,2-Trichloroethane	680	460 J J	3700	2500 J
Tetrachloroethene	680	53000 J	4600	360000
Chlorobenzene	680	Not Detected VJ	3100	Not Detected
Ethyl Benzene	680	34000 J	3000	150000
m,p-Xylene	680	140000 J	3000	620000
o-Xylene	680	50000 J	3000	220000
Styrene	680	2500 J	2900	11000
1,1,2,2-Tetrachloroethane	680	Not Detected VJ	4700	Not Detected
Bromodichloromethane	680	Not Detected VJ	4600	Not Detected
Dibromochloromethane	680	Not Detected VJ	5800	Not Detected
Chloromethane	2700	Not Detected VJ	5600	Not Detected
Acetone	2700	52000 J	6500	120000
Carbon Disulfide	2700	Not Detected VJ	8500	Not Detected
trans-1,2-Dichloroethene	2700	Not Detected VJ	11000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2700	24000 J	8000	70000
4-Methyl-2-pentanone	2700	17000 J	11000	69000
2-Hexanone	2700	880 J J	11000	3600 J
Bromoform	2700	Not Detected VJ	28000	Not Detected

E = Exceeds instrument calibration range.

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 0FS1 IN1 OCT14 Duplicate

ID#: 0410316A-01B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	97	70-130

CRS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 0FS1 IN2 OCT14

ID#: 0410316A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit ( $\mu\text{g}/\text{m}^3$ )	Amount ( $\mu\text{g}/\text{m}^3$ )
Vinyl Chloride	1400	Not Detected <i>UJ</i>	3500	Not Detected
Bromomethane	1400	Not Detected <i>UJ</i>	5300	Not Detected
Chloroethane	1400	Not Detected <i>UJ</i>	3600	Not Detected
1,1-Dichloroethene	1400	2300 <i>J</i>	5400	9100
Methylene Chloride	1400	96000 <i>J</i>	4700	330000
1,1-Dichloroethane	1400	10000 <i>J</i>	5500	42000
cis-1,2-Dichloroethene	1400	6200 <i>J</i>	5400	24000
Chloroform	1400	3700 <i>J</i>	6600	18000
1,1,1-Trichloroethane	1400	64000 <i>J</i>	7400	350000
Carbon Tetrachloride	1400	Not Detected <i>UJ</i>	8600	Not Detected
Benzene	1400	42000 <i>J</i>	4300	130000
1,2-Dichloroethane	1400	2600 <i>J</i>	5500	11000
Trichloroethene	1400	40000 <i>J</i>	7300	220000
1,2-Dichloropropane	1400	730 <i>J J</i>	6300	3400 <i>J</i>
cis-1,3-Dichloropropene	1400	Not Detected <i>UJ</i>	6200	Not Detected
Toluene	1400	280000 <i>J</i>	5100	1000000
trans-1,3-Dichloropropene	1400	Not Detected <i>UJ</i>	6200	Not Detected
1,1,2-Trichloroethane	1400	470 <i>J J</i>	7400	2600 <i>J</i>
Tetrachloroethene	1400	47000 <i>J</i>	9200	320000
Chlorobenzene	1400	Not Detected <i>UJ</i>	6300	Not Detected
Ethyl Benzene	1400	28000 <i>J</i>	5900	120000
m,p-Xylene	1400	120000 <i>J</i>	5900	520000
o-Xylene	1400	41000 <i>J</i>	5900	180000
Styrene	1400	2100 <i>J</i>	5800	8800
1,1,2,2-Tetrachloroethane	1400	Not Detected <i>UJ</i>	9300	Not Detected
Bromodichloromethane	1400	Not Detected <i>UJ</i>	9100	Not Detected
Dibromochloromethane	1400	Not Detected <i>UJ</i>	12000	Not Detected
Chloromethane	5400	580 <i>J J</i>	11000	1200 <i>J</i>
Acetone	5400	46000 <i>J</i>	13000	110000
Carbon Disulfide	5400	Not Detected <i>UJ</i>	17000	Not Detected
trans-1,2-Dichloroethene	5400	Not Detected <i>UJ</i>	22000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5400	21000 <i>J</i>	16000	63000
4-Methyl-2-pentanone	5400	13000 <i>J</i>	22000	55000
2-Hexanone	5400	Not Detected <i>UJ</i>	22000	Not Detected
Bromoform	5400	Not Detected <i>J J</i>	56000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130

CPS  
17/12/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 0FS1 IN2 OCT14

ID#: 0410316A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 0FS1 IN2 OCT14 Duplicate

ID#: 0410316A-02B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	680	710 J	1700	1800
Bromomethane	680	Not Detected VJ	2600	Not Detected
Chloroethane	680	Not Detected VJ	1800	Not Detected
1,1-Dichloroethene	680	1800 J	2700	7300
Methylene Chloride	680	98000 J	2400	340000
1,1-Dichloroethane	680	11000 J	2800	43000
cis-1,2-Dichloroethene	680	6400 J	2700	26000
Chloroform	680	3900 J	3300	19000
1,1,1-Trichloroethane	680	67000 J	3700	370000
Carbon Tetrachloride	680	Not Detected VJ	4300	Not Detected
Benzene	680	44000 J	2200	140000
1,2-Dichloroethane	680	2700 J	2800	11000
Trichloroethene	680	44000 J	3600	230000
1,2-Dichloropropane	680	810 J	3100	3700
cis-1,3-Dichloropropene	680	Not Detected VJ	3100	Not Detected
Toluene	680	320000 E J	2600	1200000 E
trans-1,3-Dichloropropene	680	Not Detected VJ	3100	Not Detected
1,1,2-Trichloroethane	680	490 J	3700	2700 J
Tetrachloroethene	680	54000 J	4600	360000
Chlorobenzene	680	Not Detected VJ	3100	Not Detected
Ethyl Benzene	680	36000 J	3000	160000
m,p-Xylene	680	150000 J	3000	650000
o-Xylene	680	53000 J	3000	230000
Styrene	680	2600 J	2900	11000
1,1,2,2-Tetrachloroethane	680	Not Detected VJ	4700	Not Detected
Bromodichloromethane	680	Not Detected VJ	4600	Not Detected
Dibromochloromethane	680	Not Detected VJ	5800	Not Detected
Chloromethane	2700	Not Detected VJ	5600	Not Detected
Acetone	2700	48000 J	6500	110000
Carbon Disulfide	2700	Not Detected VJ	8500	Not Detected
trans-1,2-Dichloroethene	2700	Not Detected VJ	11000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2700	24000 J	8000	70000
4-Methyl-2-pentanone	2700	17000 J	11000	70000
2-Hexanone	2700	Not Detected VJ	11000	Not Detected
Bromoform	2700	Not Detected VJ	28000	Not Detected

E = Exceeds instrument calibration range.

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 OCT14 Duplicate

ID#: 0410316A-02B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14

ID#: 0410316A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rot. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	2700	2100 J ✓	7000	5400 J
Bromomethane	2700	Not Detected ✓	10000	Not Detected
Chloroethane	2700	Not Detected ✓	7200	Not Detected
1,1-Dichloroethene	2700	1700 J ✓	11000	6700 J
Methylene Chloride	2700	11000 J	9400	38000
1,1-Dichloroethane	2700	3800 J	11000	15000
cis-1,2-Dichloroethene	2700	53000 J	11000	210000
Chloroform	2700	3900 J	13000	19000
1,1,1-Trichloroethane	2700	43000 J	15000	240000
Carbon Tetrachloride	2700	Not Detected ✓	17000	Not Detected
Benzene	2700	26000 J	8700	82000
1,2-Dichloroethane	2700	Not Detected ✓	11000	Not Detected
Trichloroethene	2700	44000 J	15000	240000
1,2-Dichloropropane	2700	1100 J ✓	12000	5200 J
cis-1,3-Dichloropropene	2700	Not Detected ✓	12000	Not Detected
Toluene	2700	470000 J	10000	1800000
trans-1,3-Dichloropropene	2700	Not Detected ✓	12000	Not Detected
1,1,2-Trichloroethane	2700	Not Detected ✓	15000	Not Detected
Tetrachloroethene	2700	150000 J	18000	1000000
Chlorobenzene	2700	540 J	12000	2500 J
Ethyl Benzene	2700	77000 J	12000	330000
m,p-Xylene	2700	400000 J	12000	1700000
o-Xylene	2700	150000 J	12000	650000
Styrene	2700	Not Detected ✓	12000	Not Detected
1,1,2,2-Tetrachloroethane	2700	Not Detected ✓	19000	Not Detected
Bromodichloromethane	2700	Not Detected ✓	18000	Not Detected
Dibromochloromethane	2700	Not Detected ✓	23000	Not Detected
Chloromethane	11000	Not Detected ✓	22000	Not Detected
Acetone	11000	3200 J	26000	7600 J
Carbon Disulfide	11000	Not Detected ✓	34000	Not Detected
trans-1,2-Dichloroethene	11000	Not Detected ✓	43000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	11000	1800 J	32000	5400 J
4-Methyl-2-pentanone	11000	3200 J	44000	13000 J
2-Hexanone	11000	Not Detected ✓	44000	Not Detected
Bromoform	11000	Not Detected ✓	110000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14

ID#: 0410316A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	96	70-130

CAS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14 Duplicate

ID#: 0410316A-04B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1400	3100 J	3500	8000
Bromomethane	1400	Not Detected VJ	5300	Not Detected
Chloroethane	1400	Not Detected VJ	3600	Not Detected
1,1-Dichloroethene	1400	2400 J	5400	9700
Methylene Chloride	1400	17000 J	4700	58000
1,1-Dichloroethane	1400	6200 J	5500	25000
cis-1,2-Dichloroethene	1400	87000 J	5400	340000
Chloroform	1400	5900 J	6600	29000
1,1,1-Trichloroethane	1400	70000 J	7400	380000
Carbon Tetrachloride	1400	Not Detected VJ	8600	Not Detected
Benzene	1400	42000 J	4300	130000
1,2-Dichloroethane	1400	Not Detected VJ	5500	Not Detected
Trichloroethene	1400	72000 J	7300	390000
1,2-Dichloropropane	1400	2000 J	6300	9100
cis-1,3-Dichloropropene	1400	Not Detected VJ	6200	Not Detected
Toluene	1400	870000 E J	5100	3300000 E
trans-1,3-Dichloropropene	1400	Not Detected VJ	6200	Not Detected
1,1,2-Trichloroethane	1400	Not Detected VJ	7400	Not Detected
Tetrachloroethene	1400	260000 J	9200	1800000
Chlorobenzene	1400	860 J	6300	4000 J
Ethyl Benzene	1400	150000 J	5900	640000
m,p-Xylene	1400	780000 E J	5900	3400000 E
o-Xylene	1400	290000 J	5900	1300000
Styrene	1400	Not Detected VJ	5800	Not Detected
1,1,2,2-Tetrachloroethane	1400	Not Detected LJ	9300	Not Detected
Bromodichloromethane	1400	Not Detected VJ	9100	Not Detected
Dibromochloromethane	1400	Not Detected VJ	12000	Not Detected
Chloromethane	5400	Not Detected VJ	11000	Not Detected
Acetone	5400	3100 J	13000	7300 J
Carbon Disulfide	5400	Not Detected VJ	17000	Not Detected
trans-1,2-Dichloroethene	5400	430 J	22000	1700 J
2-Butanone (Methyl Ethyl Ketone)	5400	3000 J	16000	8900 J
4-Methyl-2-pentanone	5400	5700 J	22000	23000
2-Hexanone	5400	Not Detected VJ	22000	Not Detected
Bromoform	5400	Not Detected VJ	56000	Not Detected

E = Exceeds instrument calibration range.

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130

ERS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14 Duplicate

ID#: 0410316A-04B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	95	70-130

PDS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 OCT14

ID#: 0410316A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	17	100 J	43	260
Bromomethane	17	Not Detected ✓J	65	Not Detected
Chloroethane	17	60 J	44	160
1,1-Dichloroethene	17	21 J	66	84
Methylene Chloride	17	230 J	58	820
1,1-Dichloroethane	17	200 J	68	830
cis-1,2-Dichloroethene	17	4000 J	66	16000
Chloroform	17	59 J	82	290
1,1,1-Trichloroethane	17	330 J	91	1800
Carbon Tetrachloride	17	Not Detected ✓J	100	Not Detected
Benzene	17	900 J	54	2900
1,2-Dichloroethane	17	100 J	68	410
Trichloroethene	17	510 J	90	2700
1,2-Dichloropropane	17	53 J	77	250
cis-1,3-Dichloropropene	17	Not Detected ✓J	76	Not Detected
Toluene	17	6500 J	63	24000
trans-1,3-Dichloropropene	17	Not Detected ✓J	76	Not Detected
1,1,2-Trichloroethane	17	21 J	91	110
Tetrachloroethene	17	1100 J	110	7800
Chlorobenzene	17	11 J J	77	53 J
Ethyl Benzene	17	1000 J	73	4500
m,p-Xylene	17	5100 J	73	22000
o-Xylene	17	2700 J	73	12000
Styrene	17	Not Detected ✓J	71	Not Detected
1,1,2,2-Tetrachloroethane	17	44 J	110	300
Bromodichloromethane	17	Not Detected ✓J	110	Not Detected
Dibromochloromethane	17	Not Detected ✓J	140	Not Detected
Chloromethane	67	Not Detected ✓J	140	Not Detected
Acetone	67	3800 J	160	9100
Carbon Disulfide	67	Not Detected ✓J	210	Not Detected
trans-1,2-Dichloroethene	67	7.7 J D	260	31 J
2-Butanone (Methyl Ethyl Ketone)	67	710 J	200	2100
4-Methyl-2-pentanone	67	2200 J	270	8800
2-Hexanone	67	Not Detected ✓J	270	Not Detected
Bromoform	67	Not Detected ✓J	690	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	103	70-130

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 OCT14

ID#: 0410316A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130

EDS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF2 OCT14

ID#: 0410316A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	130	540	340	1400
Bromomethane	130	Not Detected	520	Not Detected
Chloroethane	130	200	350	530
1,1-Dichloroethene	130	150	530	600
Methylene Chloride	130	8100	460	28000
1,1-Dichloroethane	130	1400	540	5900
cis-1,2-Dichloroethene	130	6500	530	26000
Chloroform	130	480	650	2400
1,1,1-Trichloroethane	130	8500	730	46000
Carbon Tetrachloride	130	Not Detected	840	Not Detected
Benzene	130	6400	430	20000
1,2-Dichloroethane	130	300	540	1200
Trichloroethene	130	5500	720	30000
1,2-Dichloropropane	130	120 J <i>J</i>	620	550 J
cis-1,3-Dichloropropene	130	Not Detected	610	Not Detected
Toluene	130	38000	500	140000
trans-1,3-Dichloropropene	130	Not Detected	610	Not Detected
1,1,2-Trichloroethane	130	66 J <i>J</i>	730	360 J
Tetrachloroethene	130	8200	910	55000
Chlorobenzene	130	Not Detected	620	Not Detected
Ethyl Benzene	130	5000	580	22000
m,p-Xylene	130	22000	580	94000
o-Xylene	130	7800	580	34000
Styrene	130	Not Detected	570	Not Detected
1,1,2,2-Tetrachloroethane	130	Not Detected	920	Not Detected
Bromodichloromethane	130	Not Detected	900	Not Detected
Dibromochloromethane	130	Not Detected	1100	Not Detected
Chloromethane	540	Not Detected	1100	Not Detected
Acetone	540	3700	1300	8700
Carbon Disulfide	540	Not Detected	1700	Not Detected
trans-1,2-Dichloroethene	540	45 J <i>J</i>	2100	180 J
2-Butanone (Methyl Ethyl Ketone)	540	2500	1600	7500
4-Methyl-2-pentanone	540	1800	2200	7600
2-Hexanone	540	73 J <i>J</i>	2200	300 J
Bromoform	540	Not Detected	5500	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF2 OCT14

ID#: 0410316A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	103	70-130

075  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF OCT14

ID#: 0410316A-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.70	26	1.8	66
Bromomethane	0.70	Not Detected	2.7	Not Detected
Chloroethane	0.70	11	1.8	28
1,1-Dichloroethene	0.70	3.9	2.8	15
Methylene Chloride	0.70	44	2.4	150
1,1-Dichloroethane	0.70	11	2.8	46
cis-1,2-Dichloroethene	0.70	49	2.8	190
Chloroform	0.70	4.7	3.4	23
1,1,1-Trichloroethane	0.70	63	3.8	340
Carbon Tetrachloride	0.70	Not Detected	4.4	Not Detected
Benzene	0.70	56	2.2	180
1,2-Dichloroethane	0.70	1.9	2.8	7.6
Trichloroethene	0.70	44	3.7	230
1,2-Dichloropropane	0.70	0.71	3.2	3.3
cis-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
Toluene	0.70	270	2.6	1000
trans-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
1,1,2-Trichloroethane	0.70	0.32 J	3.8	1.8 J
Tetrachloroethene	0.70	72	4.7	490
Chlorobenzene	0.70	0.22 J	3.2	0.99 J
Ethyl Benzene	0.70	36	3.0	160
m,p-Xylene	0.70	160	3.0	690
o-Xylene	0.70	55	3.0	240
Styrene	0.70	3.3	3.0	14
1,1,2,2-Tetrachloroethane	0.70	Not Detected	4.8	Not Detected
Bromodichloromethane	0.70	Not Detected	4.6	Not Detected
Dibromochloromethane	0.70	Not Detected	5.9	Not Detected
Chloromethane	2.8	2.4 J	5.7	4.9 J
Acetone	2.8	52	6.6	120
Carbon Disulfide	2.8	0.20 J	8.6	0.62 J
trans-1,2-Dichloroethene	2.8	0.72 J	11	2.8 J
2-Butanone (Methyl Ethyl Ketone)	2.8	36	8.2	110
4-Methyl-2-pentanone	2.8	12	11	51
2-Hexanone	2.8	0.92 J	11	3.8 J
Bromoform	2.8	Not Detected	29	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	101	70-130

12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF OCT14

ID#: 0410316A-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	102	70-130

etS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 OCT14

ID#: 0410361AR1-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	2.8
1,4-Dichlorobenzene	1.0	10
1,2-Dichlorobenzene	1.0	86
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	6.3
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	33
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	2.9
Naphthalene	1.0	85
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	6.0
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	17
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.91 J
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

OS  
12/3/64

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 INI OCT14

ID#: 0410361AR1-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	22 Q	50-150
Phenol-d5	73	50-150
Nitrobenzene-d5	88	50-150
2,4,6-Tribromophenol	76	50-150
Fluorene-d10	81	60-120
Pyrene-d10	87	60-120

CP5  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 OCT14

ID#: 0410361AR1-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	4.6
1,4-Dichlorobenzene	1.0	17
1,2-Dichlorobenzene	1.0	140
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	11
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	44
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	8.1
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	4.6
Naphthalene	1.0	130
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	9.3
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	26
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	1.4 J
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

OTS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 OCT14

ID#: 0410361AR1-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.26 J ✓
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.44 J ✓
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	0.40 Q	50-150
Phenol-d5	76	50-150
Nitrobenzene-d5	92	50-150
2,4,6-Tribromophenol	68	50-150
Fluorene-d10	85	60-120
Pyrene-d10	92	60-120

PTS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14

ID#: 0410361AR1-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	10	Not Detected
bis(2-Chloroethyl) Ether	2.0	Not Detected
2-Chlorophenol	10	Not Detected
1,3-Dichlorobenzene	2.0	18
<u>1,4-Dichlorobenzene</u>	<u>2.0</u>	<u>46</u>
1,2-Dichlorobenzene	2.0	260
2-Methylphenol (o-Cresol)	10	Not Detected
N-Nitroso-di-n-propylamine	2.0	Not Detected
4-Methylphenol/3-Methylphenol	10	Not Detected
Hexachloroethane	2.0	Not Detected
Nitrobenzene	2.0	Not Detected
Isophorone	2.0	Not Detected
2-Nitrophenol	10	Not Detected
2,4-Dimethylphenol	10	Not Detected
bis(2-Chloroethoxy) Methane	2.0	Not Detected
2,4-Dichlorophenol	10	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected
Naphthalene	2.0	260
4-Chloroaniline	20	Not Detected
Hexachlorobutadiene	2.0	13
4-Chloro-3-methylphenol	10	Not Detected
2-Methylnaphthalene	2.0	87
Hexachlorocyclopentadiene	40	Not Detected
2,4,6-Trichlorophenol	10	Not Detected
2,4,5-Trichlorophenol	10	Not Detected
2-Chloronaphthalene	2.0	Not Detected
2-Nitroaniline	20	Not Detected
Dimethylphthalate	10	Not Detected
Acenaphthylene	2.0	Not Detected
2,6-Dinitrotoluene	10	Not Detected
3-Nitroaniline	20	Not Detected
Acenaphthene	2.0	Not Detected
2,4-Dinitrophenol	40	Not Detected
4-Nitrophenol	40	Not Detected
2,4-Dinitrotoluene	10	Not Detected
Dibenzofuran	2.0	Not Detected
Diethylphthalate	10	1.3 J
Fluorene	2.0	Not Detected
4-Chlorophenyl-phenyl Ether	2.0	Not Detected
4-Nitroaniline	20	Not Detected
4,6-Dinitro-2-methylphenol	20	Not Detected

08/5  
12/13/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 OCT14

ID#: 0410361AR1-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
----------	--------------------	----------------

N-Nitrosodiphenylamine	20	Not Detected
4-Bromophenyl-phenyl Ether	2.0	Not Detected
Hexachlorobenzene	2.0	Not Detected
Pentachlorophenol	40	Not Detected
Phenanthrene	2.0	Not Detected
Anthracene	2.0	Not Detected
di-n-Butylphthalate	10	Not Detected
Fluoranthene	2.0	Not Detected
Pyrene	2.0	Not Detected
Butylbenzylphthalate	10	Not Detected
3,3'-Dichlorobenzidine	40	Not Detected
Chrysene	2.0	Not Detected
Benzo(a)anthracene	2.0	Not Detected
bis(2-Ethylhexyl)phthalate	10	Not Detected
Di-n-Octylphthalate	10	Not Detected
Benzo(b)fluoranthene	2.0	Not Detected
Benzo(k)fluoranthene	2.0	Not Detected
Benzo(a)pyrene	2.0	Not Detected
Indeno(1,2,3-c,d)pyrene	2.0	Not Detected
Dibenz(a,h)anthracene	2.0	Not Detected
Benzo(g,h,i)perylene	2.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	55 Q	50-150
Phenol-d5	72	50-150
Nitrobenzene-d5	128	50-150
2,4,6-Tribromophenol	83	50-150
Fluorene-d10	101	60-120
Pyrene-d10	108	60-120

ERS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 OCT14

ID#: 0410361AR1-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	3.9
1,2-Dichlorobenzene	1.0	30
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	7.0
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.75 J 15
Naphthalene	1.0	71
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.7
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	69
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	0.35 J 15
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.41 J 15 B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

12/3/04  
C7S

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 OCT14

ID#: 0410361AR1-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.38 J 15
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.70 J 15
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	33 Q	50-150
Phenol-d5	85	50-150
Nitrobenzene-d5	86	50-150
2,4,6-Tribromophenol	70	50-150
Fluorene-d10	85	60-120
Pyrene-d10	89	60-120

CRS  
12/31/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF2 OCT14

ID#: 0410361AR1-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	3.0
1,2-Dichlorobenzene	1.0	21
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	5.5
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.76 J 15
Naphthalene	1.0	53
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.0
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	63
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	0.36 J 15
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.86 J 15B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

12/13/04  
CNS

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF2 OCT14

ID#: 0410361AR1-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	1.2 J K
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.46 J K
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	30 Q	50-150
Phenol-d5	73	50-150
Nitrobenzene-d5	74	50-150
2,4,6-Tribromophenol	65	50-150
Fluorene-d10	77	60-120
Pyrene-d10	81	60-120

CVS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF OCT14

ID#: 0410361AR1-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	0.48 J 15
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	0.39 J 15
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	2.7 J 15B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CPS  
12/3/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF OCT14

ID#: 0410361AR1-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.97 J ✓
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	4.0 J ✓
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	44
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	69	50-150
Phenol-d5	72	50-150
Nitrobenzene-d5	62	50-150
2,4,6-Tribromophenol	65	50-150
Fluorene-d10	73	60-120
Pyrene-d10	78	60-120

12/3/14

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF OCT14

ID#: 0410361BR1-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	Not Detected
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Choronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.78 J 15B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF OCT14

ID#: 0410361BR1-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.1 J 15
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	76	50-150
Nitrobenzene-d5	72	50-150
2,4,6-Tribromophenol	70	50-150
Fluorene-d10	77	60-120
Pyrene-d10	87	60-120

175  
12/3/14

**November 11, 2004 Off-Gas Sample Laboratory Results**

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11

ID#: 0411224-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	650	310 J / <u>5</u>	1700	800 J
Bromomethane	650	Not Detected	2500	Not Detected
Chloroethane	650	Not Detected	1700	Not Detected
1,1-Dichloroethene	650	260 J / <u>5</u>	2600	1000 J
Methylene Chloride	650	44000	2200	150000
1,1-Dichloroethane	650	5300	2600	22000
cis-1,2-Dichloroethene	650	6000	2600	24000
Chloroform	650	2800	3200	14000
1,1,1-Trichloroethane	650	37000	3500	200000
Carbon Tetrachloride	650	Not Detected	4100	Not Detected
Benzene	650	18000	2100	59000
1,2-Dichloroethane	650	1200	2600	4800
Trichloroethene	650	25000	3500	130000
1,2-Dichloropropane	650	630 J / <u>5</u>	3000	2900 J
cis-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
Toluene	650	200000	2400	760000
trans-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
1,1,2-Trichloroethane	650	400 J / <u>5</u>	3500	2200 J
Tetrachloroethene	650	38000	4400	260000
Chlorobenzene	650	Not Detected	3000	Not Detected
Ethyl Benzene	650	23000	2800	100000
m,p-Xylene	650	110000	2800	470000
o-Xylene	650	41000	2800	180000
Styrene	650	Not Detected	2800	Not Detected
1,1,2,2-Tetrachloroethane	650	Not Detected	4500	Not Detected
Bromodichloromethane	650	Not Detected	4400	Not Detected
Dibromochloromethane	650	Not Detected	5500	Not Detected
Chloromethane	2600	Not Detected	5400	Not Detected
Acetone	2600	34000	6200	82000
Carbon Disulfide	2600	Not Detected	8100	Not Detected
trans-1,2-Dichloroethene	2600	Not Detected	10000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2600	28000	7700	81000
4-Methyl-2-pentanone	2600	16000	11000	67000
2-Hexanone	2600	1700 J / <u>5</u>	11000	7100 J
Bromoform	2600	Not Detected	27000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130

CBS

12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11

ID#: 0411224-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

## Surrogates

## %Recovery

## Method Limits

4-Bromofluorobenzene

115

70-130

CBS

12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 NOV11

ID#: 0411224-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	540	260 J <i>NS</i>	1400	660 J
Bromomethane	540	Not Detected	2100	Not Detected
Chloroethane	540	Not Detected	1400	Not Detected
1,1-Dichloroethene	540	210 J <i>NS</i>	2100	840 J
Methylene Chloride	540	46000	1800	160000
1,1-Dichloroethane	540	5200	2200	21000
cis-1,2-Dichloroethene	540	6000	2100	24000
Chloroform	540	2700	2600	13000
1,1,1-Trichloroethane	540	35000	2900	190000
Carbon Tetrachloride	540	Not Detected	3400	Not Detected
Benzene	540	19000	1700	60000
1,2-Dichloroethane	540	1200	2200	4900
Trichloroethene	540	24000	2900	130000
1,2-Dichloropropane	540	690	2500	3200
cis-1,3-Dichloropropene	540	Not Detected	2400	Not Detected
Toluene	540	200000	2000	750000
trans-1,3-Dichloropropene	540	Not Detected	2400	Not Detected
1,1,2-Trichloroethane	540	400 J <i>NS</i>	2900	2200 J
Tetrachloroethene	540	39000	3600	270000
Chlorobenzene	540	Not Detected	2500	Not Detected
Ethyl Benzene	540	27000	2300	120000
m,p-Xylene	540	120000	2300	530000
o-Xylene	540	48000	2300	210000
Styrene	540	Not Detected	2300	Not Detected
1,1,2,2-Tetrachloroethane	540	Not Detected	3700	Not Detected
Bromodichloromethane	540	Not Detected	3600	Not Detected
Dibromochloromethane	540	Not Detected	4600	Not Detected
Chloromethane	2100	Not Detected	4400	Not Detected
Acetone	2100	35000	5100	84000
Carbon Disulfide	2100	Not Detected	6700	Not Detected
trans-1,2-Dichloroethene	2100	Not Detected	8500	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2100	29000	6300	86000
4-Methyl-2-pentanone	2100	17000	8800	68000
2-Hexanone	2100	1900 J <i>NS</i>	8800	7700 J
Bromoform	2100	Not Detected	22000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	101	70-130

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 NOV11

ID#: 0411224-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	116	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF NOV11

ID#: 0411224-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.68	11	1.7	28
Bromomethane	0.68	Not Detected	2.6	Not Detected
Chloroethane	0.68	14	1.8	36
1,1-Dichloroethene	0.68	0.90	2.7	3.6
Methylene Chloride	0.68	43	2.4	150
1,1-Dichloroethane	0.68	10	2.8	42
cis-1,2-Dichloroethene	0.68	130	2.7	520
Chloroform	0.68	1.8	3.3	8.9
1,1,1-Trichloroethane	0.68	30	3.7	160
Carbon Tetrachloride	0.68	Not Detected	4.3	Not Detected
Benzene	0.68	31	2.2	100
1,2-Dichloroethane	0.68	0.86	2.8	3.5
Trichloroethene	0.68	27	3.6	140
1,2-Dichloropropane	0.68	0.74	3.1	3.4
cis-1,3-Dichloropropene	0.68	Not Detected	3.1	Not Detected
Toluene	0.68	71	2.6	270
trans-1,3-Dichloropropene	0.68	Not Detected	3.1	Not Detected
1,1,2-Trichloroethane	0.68	0.13 J 15	3.7	0.71 J
Tetrachloroethene	0.68	59	4.6	400
Chlorobenzene	0.68	Not Detected	3.1	Not Detected
Ethyl Benzene	0.68	6.5	3.0	28
m,p-Xylene	0.68	36	3.0	160
o-Xylene	0.68	38	3.0	170
Styrene	0.68	Not Detected	2.9	Not Detected
1,1,2,2-Tetrachloroethane	0.68	Not Detected	4.7	Not Detected
Bromodichloromethane	0.68	Not Detected	4.6	Not Detected
Dibromochloromethane	0.68	Not Detected	5.8	Not Detected
Chloromethane	2.7	Not Detected	5.6	Not Detected
Acetone	2.7	48	6.5	110
Carbon Disulfide	2.7	2.5 J 15	8.5	7.7 J
trans-1,2-Dichloroethene	2.7	0.86 J 15	11	3.4 J
2-Butanone (Methyl Ethyl Ketone)	2.7	21	8.0	62
4-Methyl-2-pentanone	2.7	5.7	11	23
2-Hexanone	2.7	0.72 J 15	11	2.9 J
Bromoform	2.7	0.24 J 15	28	2.4 J

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130

CEG  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF NOV11

ID#: 0411224-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	116	70-130

CRS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 NOV11

ID#: 0411224-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1300	340 J <i>15</i>	3400	860 J
Bromomethane	1300	Not Detected	5100	Not Detected
Chloroethane	1300	Not Detected	3500	Not Detected
1,1-Dichloroethene	1300	250 J <i>15</i>	5200	990 J
Methylene Chloride	1300	66000	4600	230000
1,1-Dichloroethane	1300	7500	5300	30000
cis-1,2-Dichloroethene	1300	5700	5200	22000
Chloroform	1300	3700	6400	18000
1,1,1-Trichloroethane	1300	64000	7200	350000
Carbon Tetrachloride	1300	Not Detected	8300	Not Detected
Benzene	1300	34000	4200	110000
1,2-Dichloroethane	1300	1900	5300	7800
Trichloroethene	1300	34000	7100	180000
1,2-Dichloropropane	1300	740 J <i>15</i>	6100	3400 J
cis-1,3-Dichloropropene	1300	Not Detected	6000	Not Detected
Toluene	1300	280000	5000	1000000
trans-1,3-Dichloropropene	1300	Not Detected	6000	Not Detected
1,1,2-Trichloroethane	1300	420 J <i>15</i>	7200	2300 J
Tetrachloroethene	1300	47000	9000	320000
Chlorobenzene	1300	Not Detected	6100	Not Detected
Ethyl Benzene	1300	30000	5700	130000
m,p-Xylene	1300	130000	5700	580000
o-Xylene	1300	46000	5700	200000
Styrene	1300	Not Detected	5600	Not Detected
1,1,2,2-Tetrachloroethane	1300	Not Detected	9100	Not Detected
Bromodichloromethane	1300	Not Detected	8800	Not Detected
Dibromochloromethane	1300	Not Detected	11000	Not Detected
Chloromethane	5300	Not Detected	11000	Not Detected
Acetone	5300	67000	12000	160000
Carbon Disulfide	5300	1200 J <i>15</i>	16000	3600 J
trans-1,2-Dichloroethene	5300	Not Detected	21000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5300	50000	16000	150000
4-Methyl-2-pentanone	5300	20000	22000	82000
2-Hexanone	5300	1600 J <i>15</i>	22000	6400 J
Bromoform	5300	Not Detected	54000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130

CDS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 NOV11

ID#: 0411224-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	107	70-130

Surrogates

%Recovery

Method  
Limits

4-Bromofluorobenzene

107

70-130

025  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 NOV11

ID#: 0411224-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1300	Not Detected	3400	Not Detected
Bromomethane	1300	Not Detected	5100	Not Detected
Chloroethane	1300	Not Detected	3500	Not Detected
1,1-Dichloroethene	1300	350 J <i>H</i>	5200	1400 J
Methylene Chloride	1300	57000	4600	200000
1,1-Dichloroethane	1300	6300	5300	25000
cis-1,2-Dichloroethene	1300	6400	5200	26000
Chloroform	1300	2700	6400	13000
1,1,1-Trichloroethane	1300	51000	7200	280000
Carbon Tetrachloride	1300	Not Detected	8300	Not Detected
Benzene	1300	28000	4200	90000
1,2-Dichloroethane	1300	1600	5300	6500
Trichloroethene	1300	28000	7100	150000
1,2-Dichloropropane	1300	620 J <i>H</i>	6100	2800 J
cis-1,3-Dichloropropene	1300	Not Detected	6000	Not Detected
Toluene	1300	230000	5000	860000
trans-1,3-Dichloropropene	1300	Not Detected	6000	Not Detected
1,1,2-Trichloroethane	1300	300 J <i>H</i>	7200	1600 J
Tetrachloroethene	1300	40000	9000	270000
Chlorobenzene	1300	Not Detected	6100	Not Detected
Ethyl Benzene	1300	26000	5700	110000
m,p-Xylene	1300	110000	5700	500000
$\alpha$ -Xylene	1300	39000	5700	170000
Styrene	1300	Not Detected	5600	Not Detected
1,1,2,2-Tetrachloroethane	1300	Not Detected	9100	Not Detected
Bromodichloromethane	1300	Not Detected	8800	Not Detected
Dibromochloromethane	1300	Not Detected	11000	Not Detected
Chloromethane	5300	Not Detected	11000	Not Detected
Acetone	5300	68000	12000	160000
Carbon Disulfide	5300	910 J <i>H</i>	16000	2800 J
trans-1,2-Dichloroethene	5300	Not Detected	21000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5300	42000	16000	120000
4-Methyl-2-pentanone	5300	17000	22000	70000
2-Hexanone	5300	1300 J <i>H</i>	22000	5200 J
Bromoform	5300	Not Detected	54000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	98	70-130

025  
12/30/09

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 NOV11

ID#: 0411224-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

## Surrogates

## %Recovery

## Method Limits

4-Bromofluorobenzene

108

70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11

ID#: 0411224-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1300	320 J <i>15</i>	3400	830 J
Bromomethane	1300	Not Detected	5200	Not Detected
Chloroethane	1300	Not Detected	3500	Not Detected
1,1-Dichloroethene	1300	220 J <i>15</i>	5300	860 J
Methylene Chloride	1300	60000	4600	210000
1,1-Dichloroethane	1300	6900	5400	28000
cis-1,2-Dichloroethene	1300	6700	5300	26000
Chloroform	1300	3200	6500	16000
1,1,1-Trichloroethane	1300	59000	7300	320000
Carbon Tetrachloride	1300	Not Detected	8400	Not Detected
Benzene	1300	31000	4300	98000
1,2-Dichloroethane	1300	1700	5400	7000
Trichloroethene	1300	32000	7200	170000
1,2-Dichloropropane	1300	650 J <i>15</i>	6200	3000 J
cis-1,3-Dichloropropene	1300	Not Detected	6100	Not Detected
Toluene	1300	250000	5000	940000
trans-1,3-Dichloropropene	1300	Not Detected	6100	Not Detected
1,1,2-Trichloroethane	1300	350 J <i>15</i>	7300	1900 J
Tetrachloroethene	1300	43000	9100	300000
Chlorobenzene	1300	Not Detected	6200	Not Detected
Ethyl Benzene	1300	28000	5800	120000
m,p-Xylene	1300	120000	5800	530000
o-Xylene	1300	43000	5800	180000
Styrene	1300	Not Detected	5700	Not Detected
1,1,2,2-Tetrachloroethane	1300	Not Detected	9200	Not Detected
Bromodichloromethane	1300	Not Detected	9000	Not Detected
Dibromochloromethane	1300	Not Detected	11000	Not Detected
Chloromethane	5400	Not Detected	11000	Not Detected
Acetone	5400	58000	13000	140000
Carbon Disulfide	5400	990 J <i>15</i>	17000	3100 J
trans-1,2-Dichloroethene	5400	Not Detected	21000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5400	44000	16000	130000
4-Methyl-2-pentanone	5400	18000	22000	72000
2-Hexanone	5400	1300 J <i>15</i>	22000	5200 J
Bromoform	5400	Not Detected	55000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	97	70-130

CES  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11

ID#: 0411224-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	107	70-130

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11 Duplicate

ID#: 0411224-06AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1300	Not Detected	3400	Not Detected
Bromomethane	1300	Not Detected	5200	Not Detected
Chloroethane	1300	Not Detected	3500	Not Detected
1,1-Dichloroethene	1300	310 J ✓	5300	1200 J
Methylene Chloride	1300	57000	4600	200000
1,1-Dichloroethane	1300	6800	5400	27000
cis-1,2-Dichloroethene	1300	6100	5300	24000
Chloroform	1300	3200	6500	15000
1,1,1-Trichloroethane	1300	56000	7300	310000
Carbon Tetrachloride	1300	Not Detected	8400	Not Detected
Benzene	1300	29000	4300	94000
1,2-Dichloroethane	1300	1800	5400	7300
Trichloroethene	1300	31000	7200	160000
1,2-Dichloropropane	1300	660 J ✓	6200	3000 J
cis-1,3-Dichloropropene	1300	Not Detected	6100	Not Detected
Toluene	1300	240000	5000	910000
trans-1,3-Dichloropropene	1300	Not Detected	6100	Not Detected
1,1,2-Trichloroethane	1300	340 J ✓	7300	1800 J
Tetrachloroethene	1300	41000	9100	280000
Chlorobenzene	1300	Not Detected	6200	Not Detected
Ethyl Benzene	1300	27000	5800	120000
m,p-Xylene	1300	120000	5800	510000
o-Xylene	1300	42000	5800	180000
Styrene	1300	Not Detected	5700	Not Detected
1,1,2,2-Tetrachloroethane	1300	Not Detected	9200	Not Detected
Bromodichloromethane	1300	Not Detected	9000	Not Detected
Dibromochloromethane	1300	Not Detected	11000	Not Detected
Chloromethane	5400	Not Detected	11000	Not Detected
Acetone	5400	55000	13000	130000
Carbon Disulfide	5400	930 J ✓	17000	2900 J
trans-1,2-Dichloroethene	5400	Not Detected	21000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5400	42000	16000	120000
4-Methyl-2-pentanone	5400	17000	22000	71000
2-Hexanone	5400	1400 J ✓	22000	5600 J
Bromoform	5400	Not Detected	55000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11 Duplicate

ID#: 0411224-06AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	111	70-130

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF NOV11

ID#: 0411224-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1.3	36	3.4	91
Bromomethane	1.3	Not Detected	5.2	Not Detected
Chloroethane	1.3	19	3.5	49
1,1-Dichloroethene	1.3	1.7	5.3	6.9
Methylene Chloride	1.3	17	4.6	59
1,1-Dichloroethane	1.3	24	5.4	98
cis-1,2-Dichloroethene	1.3	400	5.3	1600
Chloroform	1.3	3.9	6.5	19
1,1,1-Trichloroethane	1.3	46	7.3	250
Carbon Tetrachloride	1.3	Not Detected	8.4	Not Detected
Benzene	1.3	110	4.3	350
1,2-Dichloroethane	1.3	2.4	5.4	9.6
Trichloroethene	1.3	43	7.2	230
1,2-Dichloropropane	1.3	2.2	6.2	10
cis-1,3-Dichloropropene	1.3	Not Detected	6.1	Not Detected
Toluene	1.3	270	5.0	1000
trans-1,3-Dichloropropene	1.3	Not Detected	6.1	Not Detected
1,1,2-Trichloroethane	1.3	0.30 J <i>15</i>	7.3	1.6 J
Tetrachloroethene	1.3	97	9.1	660
Chlorobenzene	1.3	0.40 J <i>15</i>	6.2	1.9 J
Ethyl Benzene	1.3	36	5.8	160
m,p-Xylene	1.3	150	5.8	660
o-Xylene	1.3	58	5.8	250
Styrene	1.3	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.2	Not Detected
Bromodichloromethane	1.3	Not Detected	9.0	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
Chloromethane	5.4	Not Detected	11	Not Detected
Acetone	5.4	30	13	73
Carbon Disulfide	5.4	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	5.4	1.8 J <i>15</i>	21	7.3 J
2-Butanone (Methyl Ethyl Ketone)	5.4	Not Detected	16	Not Detected
4-Methyl-2-pentanone	5.4	18	22	75
2-Hexanone	5.4	Not Detected	22	Not Detected
Bromoform	5.4	Not Detected	55	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130

CBS  
12/30/09

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF NOV11

ID#: 0411224-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



<u>Surrogates</u>	<u>%Recovery</u>	<u>Method Limits</u>
4-Bromofluorobenzene	105	70-130

CB9  
12/30/11

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11

ID#: 0411222-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	1.4
<u>1,4-Dichlorobenzene</u>	1.0	6.6
1,2-Dichlorobenzene	1.0	52
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	22
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	1.5
Naphthalene	1.0	53
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	1.9
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	9.4
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CPS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11

ID#: 0411222-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	24 Q	50-150
Phenol-d5	97	50-150
Nitrobenzene-d5	89	50-150
2,4,6-Tribromophenol	64	50-150
Fluorene-d10	75	60-120
Pyrene-d10	86	60-120

CFS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11 Duplicate

ID#: 0411222-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	1.4
1,4-Dichlorobenzene	1.0	6.4
1,2-Dichlorobenzene	1.0	52
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	22
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	1.5
Naphthalene	1.0	53
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	1.9
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	9.2
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CO\$  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 NOV11 Duplicate

ID#: 0411222-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	23 Q	50-150
Phenol-d5	100	50-150
Nitrobenzene-d5	88	50-150
2,4,6-Tribromophenol	64	50-150
Fluorene-d10	74	60-120
Pyrene-d10	86	60-120

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 NOV11

ID#: 0411222-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	1.8
<u>1,4-Dichlorobenzene</u>	1.0	8.1
1,2-Dichlorobenzene	1.0	65
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	31
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	2.3
Naphthalene	1.0	78
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.8
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	13
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CPS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 NOV11

ID#: 0411222-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.48 J <i>X/B</i>
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	4.0 J <i>B</i>
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	23 Q	50-150
Phenol-d5	106	50-150
Nitrobenzene-d5	97	50-150
2,4,6-Tribromophenol	51	50-150
Fluorene-d10	81	60-120
Pyrene-d10	92	60-120

CBS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF NOV11

ID#: 0411222-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
<u>1,4-Dichlorobenzene</u>	<u>1.0</u>	<u>Not Detected</u>
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	Not Detected
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	<u>5.0</u>	<u>Not Detected</u>
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	<u>5.0</u>	<u>Not Detected</u>
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CRS  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF NOV11

ID#: 0411222-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.30 J
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.70 J
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	76	50-150
Phenol-d5	78	50-150
Nitrobenzene-d5	72	50-150
2,4,6-Tribromophenol	64	50-150
Fluorene-d10	66	60-120
Pyrene-d10	73	60-120

CPG  
2/20/09

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 NOV11

ID#: 0411222-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	4.6
<u>1,4-Dichlorobenzene</u>	1.0	17
1,2-Dichlorobenzene	1.0	120
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	36
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	2.0 J 15
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	3.1
Naphthalene	1.0	95
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	8.2
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	18
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

C75  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 NOV11

ID#: 0411222-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.65 J 15
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	12 Q	50-150
Phenol-d5	121	50-150
Nitrobenzene-d5	95	50-150
2,4,6-Tribromophenol	66	50-150
Fluorene-d10	80	60-120
Pyrene-d10	91	60-120

025  
12/30/14

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 NOV11

ID#: 0411222-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	3.7
<u>1,4-Dichlorobenzene</u>	1.0	14
1,2-Dichlorobenzene	1.0	100
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	30
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	2.9
Naphthalene	1.0	94
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	7.4
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	14
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CB3  
12/30/09

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 INF1 NOV11

ID#: 0411222-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.37 J
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.1 J
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	16 Q	50-150
Phenol-d5	116	50-150
Nitrobenzene-d5	95	50-150
2,4,6-Tribromophenol	71	50-150
Fluorene-d10	81	60-120
Pyrene-d10	90	60-120

02/09  
12/30/09

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11

ID#: 0411222-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	3.4
<u>1,4-Dichlorobenzene</u>	1.0	13
1,2-Dichlorobenzene	1.0	100
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	32
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	1.7 J 15
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	3.3
Naphthalene	1.0	100
4-Chloroaniline	10	Not Detected
<u>Hexachlorobutadiene</u>	1.0	7.3
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	17
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

025  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 NOV11

ID#: 0411222-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.33 J
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	Not Detected
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	16 Q	50-150
Phenol-d5	112	50-150
Nitrobenzene-d5	94	50-150
2,4,6-Tribromophenol	67	50-150
Fluorene-d10	80	60-120
Pyrene-d10	90	60-120

CBG  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF NOV11

ID#: 0411222-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
<u>1,4-Dichlorobenzene</u>	1.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
<u>bis(2-Chloroethoxy) Methane</u>	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	Not Detected
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
<u>2,6-Dinitrotoluene</u>	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
<u>4-Nitroaniline</u>	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CB5  
12/30/04

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF NOV11

ID#: 0411222-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.3 J 15
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	65	50-150
Phenol-d5	72	50-150
Nitrobenzene-d5	67	50-150
2,4,6-Tribromophenol	64	50-150
Fluorene-d10	66	60-120
Pyrene-d10	73	60-120

CFS  
12/30/04

**December 17, 2004 Off-Gas Sample Laboratory Results**



DEC 04'

TO-14

AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17

ID#: 0412415A-01A

MODIFIED EPA METHOD TO-14A. GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	260	160 J /5	660	410 J
Bromomethane	260	Not Detected	1000	Not Detected
Chloroethane	260	Not Detected	690	Not Detected
1,1-Dichloroethene	260	120 J /5	1000	490 J
Methylene Chloride	260	9800	900	34000
1,1-Dichloroethane	260	1800	1000	7100
cis-1,2-Dichloroethene	260	2400	1000	9600
Chloroform	260	1100	1300	5500
1,1,1-Trichloroethane	260	14000	1400	77000
Carbon Tetrachloride	260	Not Detected	1600	Not Detected
Benzene	260	5100	830	16000
1,2-Dichloroethane	260	570	1000	2300
Trichloroethene	260	8700	1400	47000
1,2-Dichloropropane	260	270	1200	1200
cis-1,3-Dichloropropene	260	Not Detected	1200	Not Detected
Toluene	260	60000	980	230000
trans-1,3-Dichloropropene	260	Not Detected	1200	Not Detected
1,1,2-Trichloroethane	260	94 J /5	1400	510 J
Tetrachloroethene	260	13000	1800	92000
Chlorobenzene	260	Not Detected	1200	Not Detected
Ethyl Benzene	260	7200	1100	31000
m,p-Xylene	260	36000	1100	160000
o-Xylene	260	14000	1100	60000
Styrene	260	Not Detected	1100	Not Detected
1,1,2,2-Tetrachloroethane	260	Not Detected	1800	Not Detected
Bromodichloromethane	260	Not Detected	1700	Not Detected
Dibromochloromethane	260	Not Detected	2200	Not Detected
Chloromethane	1000	Not Detected	2100	Not Detected
Acetone	1000	7000	2500	17000
Carbon Disulfide	1000	Not Detected	3200	Not Detected
trans-1,2-Dichloroethene	1000	Not Detected	4100	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1000	7300	3100	22000
4-Methyl-2-pentanone	1000	3800	4300	16000
2-Hexanone	1000	340 J /5	4300	1400 J
Bromoform	1000	Not Detected	11000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130

CDR  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17

ID#: 0412415A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	116	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 Dec17

ID#: 0412415A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	220	170 J /5	550	440 J
Bromomethane	220	Not Detected	830	Not Detected
Chloroethane	220	Not Detected	570	Not Detected
1,1-Dichloroethene	220	140 J /5	850	540 J
Methylene Chloride	220	14000	750	48000
1,1-Dichloroethane	220	2500	870	10000
cis-1,2-Dichloroethene	220	3500	850	14000
Chloroform	220	1700	1000	8200
1,1,1-Trichloroethane	220	19000	1200	110000
Carbon Tetrachloride	220	Not Detected	1400	Not Detected
Benzene	220	7300	690	23000
1,2-Dichloroethane	220	830	870	3400
Trichloroethene	220	12000	1200	68000
1,2-Dichloropropane	220	380	990	1700
cis-1,3-Dichloropropene	220	Not Detected	980	Not Detected
Toluene	220	82000	810	310000
trans-1,3-Dichloropropene	220	Not Detected	980	Not Detected
1,1,2-Trichloroethane	220	140 J /5	1200	780 J
Tetrachloroethene	220	19000	1400	130000
Chlorobenzene	220	Not Detected	990	Not Detected
Ethyl Benzene	220	9600	930	41000
m,p-Xylene	220	46000	930	200000
o-Xylene	220	18000	930	76000
Styrene	220	Not Detected	920	Not Detected
1,1,2,2-Tetrachloroethane	220	Not Detected	1500	Not Detected
Bromodichloromethane	220	Not Detected	1400	Not Detected
Dibromochloromethane	220	Not Detected	1800	Not Detected
Chloromethane	860	Not Detected	1800	Not Detected
Acetone	860	10000	2000	24000
Carbon Disulfide	860	Not Detected	2700	Not Detected
trans-1,2-Dichloroethene	860	Not Detected	3400	Not Detected
2-Butanone (Methyl Ethyl Ketone)	860	11000	2500	33000
4-Methyl-2-pentanone	860	5400	3500	22000
2-Hexanone	860	480 J /5	3500	2000 J
Bromoform	860	Not Detected	8900	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130

CPS  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 Dec17

ID#: 0412415A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	113	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (11877)

ID#: 0412415A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.67	41	1.7	100
Bromomethane	0.67	Not Detected	2.6	Not Detected
Chloroethane	0.67	1.2	1.8	3.0
1,1-Dichloroethene	0.67	70	2.6	280
Methylene Chloride	0.67	35	2.3	120
1,1-Dichloroethane	0.67	2.9	2.7	12
cis-1,2-Dichloroethene	0.67	63	2.6	250
Chloroform	0.67	3.3	3.3	16
1,1,1-Trichloroethane	0.67	19	3.6	100
Carbon Tetrachloride	0.67	0.66 J /5	4.2	4.2
Benzene	0.67	140	2.1	460
1,2-Dichloroethane	0.67	Not Detected	2.7	Not Detected
Trichloroethene	0.67	56	3.6	300
1,2-Dichloropropane	0.67	0.34 J /5	3.1	1.6 J
cis-1,3-Dichloropropene	0.67	1.6	3.0	7.1
Toluene	0.67	150	2.5	560
trans-1,3-Dichloropropene	0.67	1.5	3.0	6.8
1,1,2-Trichloroethane	0.67	Not Detected	3.6	Not Detected
Tetrachloroethene	0.67	200	4.5	1400
Chlorobenzene	0.67	7.4	3.1	34
Ethyl Benzene	0.67	28	2.9	120
m,p-Xylene	0.67	160	2.9	680
o-Xylene	0.67	69	2.9	300
Styrene	0.67	17	2.8	74
1,1,2,2-Tetrachloroethane	0.67	Not Detected	4.6	Not Detected
Bromodichloromethane	0.67	Not Detected	4.5	Not Detected
Dibromochloromethane	0.67	Not Detected	5.7	Not Detected
Chloromethane	2.7	21	5.5	43
Acetone	2.7	48	6.4	110
Carbon Disulfide	2.7	7.1	8.3	22
trans-1,2-Dichloroethene	2.7	19	11	76
2-Butanone (Methyl Ethyl Ketone)	2.7	18	7.9	52
4-Methyl-2-pentanone	2.7	6.3	11	26
2-Hexanone	2.7	1.3 J /5	11	5.2 J
Bromoform	2.7	0.21 J /5	28	2.1 J

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	97	70-130

(RS)  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (11877)

ID#: 0412415A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	126	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (12019)

ID#: 0412415A-03B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	650	170 J /5	1700	430 J
Bromomethane	650	Not Detected	2500	Not Detected
Chloroethane	650	Not Detected	1700	Not Detected
1,1-Dichloroethene	650	300 J /5	2600	1200 J
Methylene Chloride	650	44000	2200	150000
1,1-Dichloroethane	650	5700	2600	23000
cis-1,2-Dichloroethene	650	3800	2600	15000
Chloroform	650	2800	3200	14000
1,1,1-Trichloroethane	650	53000	3500	290000
Carbon Tetrachloride	650	Not Detected	4100	Not Detected
Benzene	650	26000	2100	84000
1,2-Dichloroethane	650	1500	2600	6200
Trichloroethene	650	27000	3500	150000
1,2-Dichloropropane	650	500 J /5	3000	2300 J
cis-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
Toluene	650	230000	2400	850000
trans-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
1,1,2-Trichloroethane	650	260 J /5	3500	1400 J
Tetrachloroethene	650	39000	4400	270000
Chlorobenzene	650	Not Detected	3000	Not Detected
Ethyl Benzene	650	25000	2800	110000
m,p-Xylene	650	120000	2800	520000
<i>o</i> -Xylene	650	43000	2800	190000
Styrene	650	Not Detected	2800	Not Detected
1,1,2,2-Tetrachloroethane	650	Not Detected	4500	Not Detected
Bromodichloromethane	650	Not Detected	4400	Not Detected
Dibromochloromethane	650	Not Detected	5500	Not Detected
Chloromethane	2600	Not Detected	5400	Not Detected
Acetone	2600	31000	6200	74000
Carbon Disulfide	2600	Not Detected	8100	Not Detected
trans-1,2-Dichloroethene	2600	Not Detected	10000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2600	31000	7700	91000
4-Methyl-2-pentanone	2600	18000	11000	75000
2-Hexanone	2600	1200 J /5	11000	5000 J
Bromoform	2600	Not Detected	27000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (12019)

ID#: 0412415A-03B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	118	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (12019)

ID#: 0412415A-03C

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	86	180	220	460
Bromomethane	86	Not Detected	340	Not Detected
Chloroethane	86	110	230	290
1,1-Dichloroethene	86	180	340	710
Methylene Chloride	86	49000 E /E	300	170000 E
1,1-Dichloroethane	86	6400	350	26000
cis-1,2-Dichloroethene	86	4300	340	17000
Chloroform	86	3100	420	15000
1,1,1-Trichloroethane	86	57000 E /E	470	310000 E
Carbon Tetrachloride	86	Not Detected	540	Not Detected
Benzene	86	30000	280	94000
1,2-Dichloroethane	86	1700	350	6800
Trichloroethene	86	30000	460	160000
1,2-Dichloropropane	86	620	400	2800
cis-1,3-Dichloropropene	86	Not Detected	390	Not Detected
Toluene	86	120000 E /E	320	460000 E
trans-1,3-Dichloropropene	86	Not Detected	390	Not Detected
1,1,2-Trichloroethane	86	300	470	1700
Tetrachloroethene	86	42000 E /E	590	280000 E
Chlorobenzene	86	Not Detected	400	Not Detected
Ethyl Benzene	86	28000	380	120000
m,p-Xylene	86	120000 E /E	380	500000 E
o-Xylene	86	46000 E /E	380	200000 E
Styrene	86	2900	370	12000
1,1,2,2-Tetrachloroethane	86	Not Detected	590	Not Detected
Bromodichloromethane	86	Not Detected	580	Not Detected
Dibromochloromethane	86	Not Detected	740	Not Detected
Chloromethane	350	Not Detected	710	Not Detected
Acetone	350	37000 E /E	820	88000 E
Carbon Disulfide	350	26 J	1100	82 J
trans-1,2-Dichloroethene	350	69 J	1400	270 J
2-Butanone (Methyl Ethyl Ketone)	350	40000 E /E	1000	120000 E
4-Methyl-2-pentanone	350	22000	1400	90000
2-Hexanone	350	1500	1400	6200
Bromoform	350	Not Detected	3600	Not Detected

E = Exceeds instrument calibration range.

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130

CVS  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17 (12019)

ID#: 0412415A-03C

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
4-Bromofluorobenzene	121	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 Dec17

ID#: 0412415A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	650	230 J 15	1700	590 J
Bromomethane	650	Not Detected	2500	Not Detected
Chloroethane	650	Not Detected	1700	Not Detected
1,1-Dichloroethene	650	220 J 15	2600	860 J
Methylene Chloride	650	34000	2200	120000
1,1-Dichloroethane	650	4600	2600	19000
cis-1,2-Dichloroethene	650	5200	2600	21000
Chloroform	650	2100	3200	10000
1,1,1-Trichloroethane	650	42000	3500	230000
Carbon Tetrachloride	650	Not Detected	4100	Not Detected
Benzene	650	21000	2100	67000
1,2-Dichloroethane	650	1200	2600	4900
Trichloroethene	650	21000	3500	110000
1,2-Dichloropropane	650	390 J 15	3000	1800 J
cis-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
Toluene	650	170000	2400	640000
trans-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
1,1,2-Trichloroethane	650	210 J 15	3500	1100 J
Tetrachloroethene	650	30000	4400	200000
Chlorobenzene	650	Not Detected	3000	Not Detected
Ethyl Benzene	650	19000	2800	83000
m,p-Xylene	650	88000	2800	380000
o-Xylene	650	31000	2800	130000
Styrene	650	1700	2800	7300
1,1,2,2-Tetrachloroethane	650	Not Detected	4500	Not Detected
Bromodichloromethane	650	Not Detected	4400	Not Detected
Dibromochloromethane	650	Not Detected	5500	Not Detected
Chloromethane	2600	Not Detected	5400	Not Detected
Acetone	2600	26000	6200	63000
Carbon Disulfide	2600	Not Detected	8100	Not Detected
trans-1,2-Dichloroethene	2600	Not Detected	10000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2600	26000	7700	78000
4-Methyl-2-pentanone	2600	15000	11000	61000
2-Hexanone	2600	880 J 15	11000	3600 J
Bromoform	2600	Not Detected	27000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 Dec17

ID#: 0412415A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	112	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 Dec17

ID#: 0412415A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	650	Not Detected	1700	Not Detected
Bromomethane	650	Not Detected	2500	Not Detected
Chloroethane	650	Not Detected	1700	Not Detected
1,1-Dichloroethene	650	240 J /J	2600	940 J
Methylene Chloride	650	35000	2200	120000
1,1-Dichloroethane	650	4600	2600	19000
cis-1,2-Dichloroethene	650	4900	2600	19000
Chloroform	650	2200	3200	11000
1,1,1-Trichloroethane	650	42000	3500	230000
Carbon Tetrachloride	650	Not Detected	4100	Not Detected
Benzene	650	21000	2100	67000
1,2-Dichloroethane	650	1100	2600	4500
Trichloroethene	650	21000	3500	110000
1,2-Dichloropropane	650	400 J /J	3000	1800 J
cis-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
Toluene	650	180000	2400	670000
trans-1,3-Dichloropropene	650	Not Detected	3000	Not Detected
1,1,2-Trichloroethane	650	220 J /J	3500	1200 J
Tetrachloroethene	650	32000	4400	220000
Chlorobenzene	650	Not Detected	3000	Not Detected
Ethyl Benzene	650	20000	2800	87000
m,p-Xylene	650	95000	2800	410000
o-Xylene	650	34000	2800	150000
Styrene	650	Not Detected	2800	Not Detected
1,1,2,2-Tetrachloroethane	650	Not Detected	4500	Not Detected
Bromodichloromethane	650	Not Detected	4400	Not Detected
Dibromochloromethane	650	Not Detected	5500	Not Detected
Chloromethane	2600	Not Detected	5400	Not Detected
Acetone	2600	13000	6200	32000
Carbon Disulfide	2600	Not Detected	8100	Not Detected
trans-1,2-Dichloroethene	2600	Not Detected	10000	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2600	8600	7700	25000
4-Methyl-2-pentanone	2600	2000 J /J	11000	8000 J
2-Hexanone	2600	Not Detected	11000	Not Detected
Bromoform	2600	Not Detected	27000	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 Dec17

ID#: 0412415A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	113	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 Dec17

ID#: 0412415A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1.3	82	3.4	210
Bromomethane	1.3	Not Detected	5.2	Not Detected
Chloroethane	1.3	16	3.5	41
1,1-Dichloroethene	1.3	110	5.3	420
Methylene Chloride	1.3	84	4.6	290
1,1-Dichloroethane	1.3	27	5.4	110
cis-1,2-Dichloroethene	1.3	380	5.3	1500
Chloroform	1.3	8.3	6.5	40
1,1,1-Trichloroethane	1.3	80	7.3	430
Carbon Tetrachloride	1.3	Not Detected	8.4	Not Detected
Benzene	1.3	380	4.3	1200
1,2-Dichloroethane	1.3	3.6	5.4	15
Trichloroethene	1.3	140	7.2	730
1,2-Dichloropropane	1.3	2.4	6.2	11
cis-1,3-Dichloropropene	1.3	1.9	6.1	8.6
Toluene	1.3	530	5.0	2000
trans-1,3-Dichloropropene	1.3	1.9	6.1	8.6
1,1,2-Trichloroethane	1.3	0.79 J / 5	7.3	4.3 J
Tetrachloroethene	1.3	440	9.1	3000
Chlorobenzene	1.3	9.0	6.2	41
Ethyl Benzene	1.3	85	5.8	370
m,p-Xylene	1.3	310	5.8	1300
o-Xylene	1.3	190	5.8	850
Styrene	1.3	38	5.7	160
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.2	Not Detected
Bromodichloromethane	1.3	Not Detected	9.0	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
Chloromethane	5.4	49	11	100
Acetone	5.4	74	13	180
Carbon Disulfide	5.4	8.4	17	26
trans-1,2-Dichloroethene	5.4	43	21	170
2-Butanone (Methyl Ethyl Ketone)	5.4	54	16	160
4-Methyl-2-pentanone	5.4	22	22	88
2-Hexanone	5.4	2.4 J / 5	22	9.8 J
Bromoform	5.4	0.54 J / 5	55	5.6 J

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	96	70-130

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 Dec17

ID#: 0412415A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN



Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	125	70-130

DEC 04'

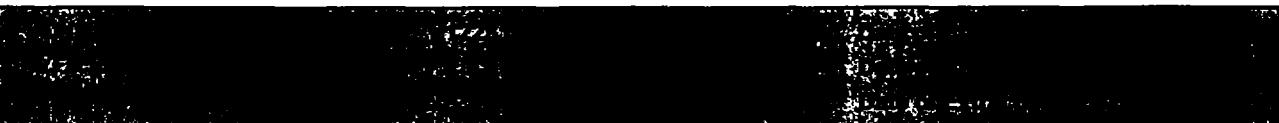
TO-13

AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17

ID#: 0412415B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN



Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	2.8
1,2-Dichlorobenzene	1.0	20
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	10
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	0.75 J 15
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.61 J 15
Naphthalene	1.0	18
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	0.69 J 15
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	3.3
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

1/2/05 *OKS*

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17

ID#: 0412415B-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN



Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.32 J 18
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.5 J 18
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	26 Q	50-150
Phenol-d5	83	50-150
Nitrobenzene-d5	79	50-150
2,4,6-Tribromophenol	68	50-150
Fluorene-d10	76	60-120
Pyrene-d10	80	60-120

CTS  
1/31/05 -

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17 Duplicate

ID#: 0412415B-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
----------	--------------------	----------------

Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	2.7
1,2-Dichlorobenzene	1.0	20
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	10
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	0.71 J / 5
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.74 J / 5
Naphthalene	1.0	18
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	0.72 J / 5
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	3.1
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

ACS  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN1 Dec17 Duplicate

ID#: 0412415B-01AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN



Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	Not Detected
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.5 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	26 Q	50-150
Phenol-d5	82	50-150
Nitrobenzene-d5	78	50-150
2,4,6-Tribromophenol	68	50-150
Fluorene-d10	76	60-120
Pyrene-d10	80	60-120

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 Dec17

ID#: 0412415B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
<u>1,4-Dichlorobenzene</u>	<u>1.0</u>	<u>Not Detected</u>
1,2-Dichlorobenzene	1.0	13
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	4.4
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	0.88 J /5
<u>bis(2-Chloroethoxy) Methane</u>	<u>1.0</u>	<u>Not Detected</u>
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	0.32 J /5
Naphthalene	1.0	8.8
4-Chloroaniline	10	Not Detected
<u>Hexachlorobutadiene</u>	<u>1.0</u>	<u>0.38 J /5</u>
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	1.2
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	<u>5.0</u>	<u>Not Detected</u>
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	<u>5.0</u>	<u>Not Detected</u>
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

CRS  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 OFS1 IN2 Dec17

ID#: 0412415B-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN



Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.47 J 13
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.35 J 18
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	93
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	27 Q	50-150
Phenol-d5	82	50-150
Nitrobenzene-d5	74	50-150
2,4,6-Tribromophenol	85	50-150
Fluorene-d10	82	60-120
Pyrene-d10	93	60-120

CHS  
1/31/03

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17

ID#: 0412415B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	0.19 J /J
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.29 J /B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

# AIR TOXICS LTD.

SAMPLE NAME: ACS T01 EFF Dec17

ID#: 0412415B-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
----------	--------------------	----------------

N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.60 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.46 J /B
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	2.5 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	66	50-150
Phenol-d5	73	50-150
Nitrobenzene-d5	63	50-150
2,4,6-Tribromophenol	82	50-150
Fluorene-d10	81	60-120
Pyrene-d10	96	60-120

CHS  
1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 Dec17

ID#: 0412415B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	10
1,2-Dichlorobenzene	1.0	89
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	36
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	2.9
Naphthalene	1.0	74
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	4.7
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	17
Hexachlorocyclopentadiene	20	0.30 J K
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.68 J K
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 ONS1 IN1 Dec17

ID#: 0412415B-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.85 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.70 J /B
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.7 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	20 Q	50-150
Phenol-d5	86	50-150
Nitrobenzene-d5	98	50-150
2,4,6-Tribromophenol	84	50-150
Fluorene-d10	87	60-120
Pyrene-d10	93	60-120

CBS  
1/31/0-

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 Dec17

ID#: 0412415B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
<u>1,4-Dichlorobenzene</u>	1.0	<u>6.5</u>
1,2-Dichlorobenzene	1.0	56
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methyphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	20
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	1.5
Naphthalene	1.0	42
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	2.8
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	6.2
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
<u>2,4,5-Trichlorophenol</u>	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
<u>2,4-Dinitrotoluene</u>	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN1 Dec17

ID#: 0412415B-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.48 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.36 J /B
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	0.91 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	20 Q	50-150
Phenol-d5	76	50-150
Nitrobenzene-d5	78	50-150
2,4,6-Tribromophenol	76	50-150
Fluorene-d10	78	60-120
Pyrene-d10	86	60-120

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 Dec17

ID#: 0412415B-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	8.0
1,2-Dichlorobenzene	1.0	68
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	26
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	2.0
Naphthalene	1.0	55
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	3.4
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	8.3
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	Not Detected
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

1/31/05

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 IN2 Dec17

ID#: 0412415B-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.33 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.56 J /B
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.1 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Q = Exceeds Quality Control limits.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	20 Q	50-150
Phenol-d5	84	50-150
Nitrobenzene-d5	94	50-150
2,4,6-Tribromophenol	75	50-150
Fluorene-d10	79	60-120
Pyrene-d10	84	60-120

205  
1/31/05-

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF Dec17

ID#: 0412415B-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

Compound	Rpt. Limit ( $\mu$ g)	Amount ( $\mu$ g)
Phenol	5.0	Not Detected
bis(2-Chloroethyl) Ether	1.0	Not Detected
2-Chlorophenol	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected
1,2-Dichlorobenzene	1.0	1.2
2-Methylphenol (o-Cresol)	5.0	Not Detected
N-Nitroso-di-n-propylamine	1.0	Not Detected
4-Methylphenol/3-Methylphenol	5.0	Not Detected
Hexachloroethane	1.0	Not Detected
Nitrobenzene	1.0	Not Detected
Isophorone	1.0	Not Detected
2-Nitrophenol	5.0	Not Detected
2,4-Dimethylphenol	5.0	Not Detected
bis(2-Chloroethoxy) Methane	1.0	Not Detected
2,4-Dichlorophenol	5.0	Not Detected
1,2,4-Trichlorobenzene	1.0	Not Detected
Naphthalene	1.0	0.57 J /S
4-Chloroaniline	10	Not Detected
Hexachlorobutadiene	1.0	Not Detected
4-Chloro-3-methylphenol	5.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
Hexachlorocyclopentadiene	20	Not Detected
2,4,6-Trichlorophenol	5.0	Not Detected
2,4,5-Trichlorophenol	5.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
2-Nitroaniline	10	Not Detected
Dimethylphthalate	5.0	Not Detected
Acenaphthylene	1.0	Not Detected
2,6-Dinitrotoluene	5.0	Not Detected
3-Nitroaniline	10	Not Detected
Acenaphthene	1.0	Not Detected
2,4-Dinitrophenol	20	Not Detected
4-Nitrophenol	20	Not Detected
2,4-Dinitrotoluene	5.0	Not Detected
Dibenzofuran	1.0	Not Detected
Diethylphthalate	5.0	0.28 J /B
Fluorene	1.0	Not Detected
4-Chlorophenyl-phenyl Ether	1.0	Not Detected
4-Nitroaniline	10	Not Detected
4,6-Dinitro-2-methylphenol	10	Not Detected

# AIR TOXICS LTD.

SAMPLE NAME: ACS T02 EFF Dec17

ID#: 0412415B-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN



Compound	Rpt. Limit (ug)	Amount (ug)
N-Nitrosodiphenylamine	10	Not Detected
4-Bromophenyl-phenyl Ether	1.0	Not Detected
Hexachlorobenzene	1.0	Not Detected
Pentachlorophenol	20	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
di-n-Butylphthalate	5.0	0.79 J /B
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Butylbenzylphthalate	5.0	0.79 J /B
3,3'-Dichlorobenzidine	20	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
bis(2-Ethylhexyl)phthalate	5.0	1.0 J /B
Di-n-Octylphthalate	5.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

J = Estimated value.

Container Type: XAD Tube

Surrogates	%Recovery	Method Limits
2-Fluorophenol	61	50-150
Phenol-d5	71	50-150
Nitrobenzene-d5	63	50-150
2,4,6-Tribromophenol	73	50-150
Fluorene-d10	75	60-120
Pyrene-d10	81	60-120

CPG  
1/31/05